

PACIFIC PULP *and* PAPER INDUSTRY

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U. S. Department of Agriculture

Volume 3
Number 5

APRIL, 1929

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INTO THE PRIMEVAL

Events of the Month Foreshadow the Opening of the Last Great Virgin Stand of Timber in America, the Pulpwood Areas on the Western Slopes of the Olympics

It guarantees you

HOOKER CHEMICALS

EVERY product, every process has originated in or passed thru our Research Department. We are justly proud of this painstaking care in development and production.

*of the
HIGHEST
QUALITY*

***It guarantees you
Hooker Chemicals of
the Highest Quality.***

With plants conveniently located and our policy of carrying ample stocks of materials on hand at all times, we are prepared to make prompt and efficient deliveries to all sections of the country.

HOOKER ELECTROCHEMICAL COMPANY

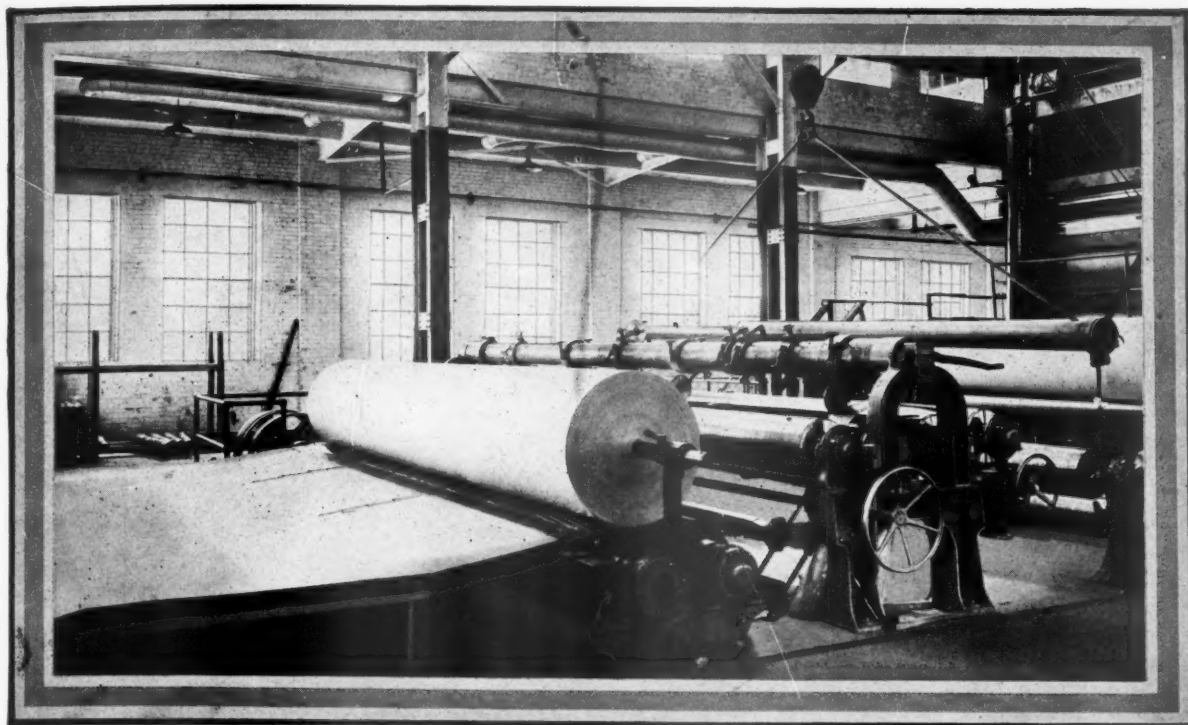
WESTERN
SALES OFFICE—
Tacoma, Washington
PLANT—
Tacoma, Washington

EASTERN
SALES OFFICE—
25 Pine St., New York City
PLANT—
Niagara Falls, N. Y.



Hooker Chemicals

CAUSTIC SODA
LIQUID CHLORINE
BLEACHING POWDER
MURIATIC ACID
MONOCHLORBENZENE
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BENZOATE OF SODA
BENZOIC ACID
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FERRIC CHLORIDE
SULPHUR MONOCHLORIDE
SULPHUR DICHLORIDE
SULPTURYL CHLORIDE
SALT



Innovations...

Beloit Winder, Automatic Unloading

On the Beloit winder, paper rolls are arranged in Timken bearings. Large-diameter bottom slitters also run on Timkens. Bottom slitters are driven with texrope drive from motor, making a smooth, quiet drive. Center slitters can all be disengaged and engaged by the quarter turn of a lever on front of machine. This makes it most convenient for the operator in threading a new sheet through the winder. When the roll of paper has attained the desired size, the operator presses a button and the rear drum is automatically raised, discharging the roll onto a table or truck without the use of a hoist or crane. Besides being a great time and labor-saver, it prevents damaging the ends of the paper rolls.

Dryers are equipped with Beloit steam fittings, the joints requiring no lubrication whatsoever. Very little power is consumed and they automatically adjust themselves to any normal increase in steam pressure.

The BELOIT Way is the MODERN Way

BELOIT IRON WORKS, BELOIT, WIS., U.S.A.

The **BELOIT**



*Other
Beloit Products*
Cutters
Cylinder Machines
Drives for Paper
Machines
Winders and Slitters
Removable
Fourdriniers
Aldrich Patented
High-Speed Shakes
Pasting Machines
Stuff Pumps
Reels
Oilless Dryer Fittings
Yankee Machines
Rebuilding and Repairs

When writing to BELOIT IRON WORKS please mention PACIFIC PULP & PAPER INDUSTRY

150 Pounds Pressure



CRANE VALVES



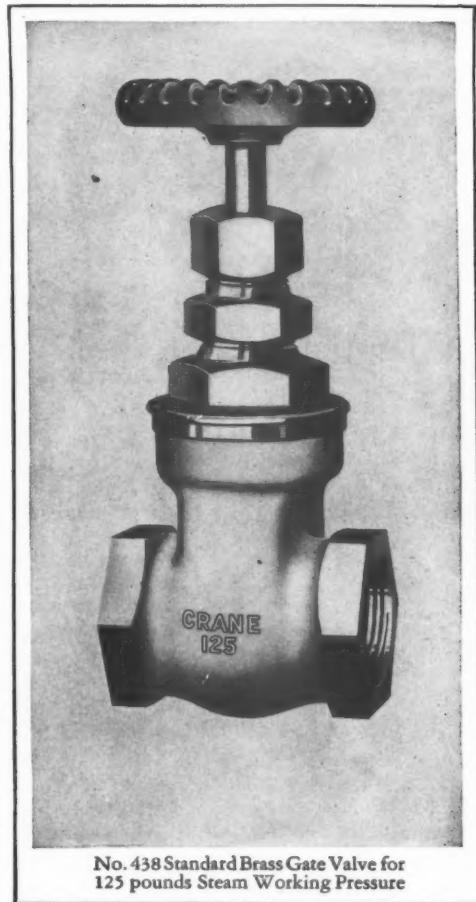
2500 Pounds Pressure

COMPLETE ASSURANCE
OF SAFETY
AND SATISFACTION
COSTS SO LITTLE



Occasionally Crane Co.'s prices may seem a little higher, but consider this: The number 438 Standard Brass Gate Valve pictured to the right and recommended for steam working pressures up to 125 pounds is stronger than many valves of the same type rated at 150 pounds. In other words you are receiving 25% more strength when you buy this Crane valve than you would get by purchasing certain other brands.

Perhaps Crane Co.'s ratings seem low. But 74 years of research and practical experience have definitely proved the Crane theory that it is more economical to rate materials conserva-



No. 438 Standard Brass Gate Valve for
125 pounds Steam Working Pressure

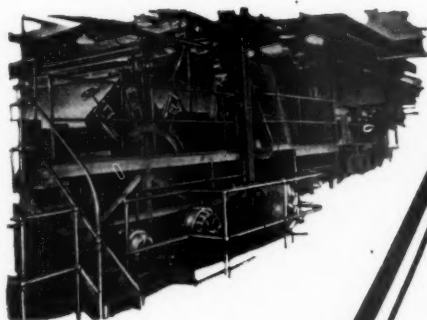
tively. The extra strength that Crane Co. gives is a guaranty of efficiency, of lowered operating costs, of minimized replacements, and a security against the appalling waste of time and money that forms the wake of every accident.

CRANE

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVENUE, CHICAGO
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Board from a Single Sheet



HOW much better to run a single sheet of uniform thickness and formation to the drier, rather than to have a sheet of several laminations passing through press rolls.

There are no planes of weakness. The whole sheet is homogeneous. A cross section would show uniform structure.

That's what the Oliver Board Machine provides.

Write for full details of this better way of making board—the Oliver method several plants now use.

Nearly 500 Oliver United Units are being used in the pulp and paper industry for the following purposes:

- Deckers after Screening
- Save Alls
- High Density before Bleaching
- Bleach Washers
- Brown Stock Washers and Re-Washers
- Lime Mud Washers
- Wet Machine Moulds
- Board Forming Moulds
- Decker Save-All Units

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Successors to Oliver Continuous Filter Co. and United Filters Corporation

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Factories: Oakland, Calif.; Hazleton, Penna.

Cable Address: OLIUNIFILT

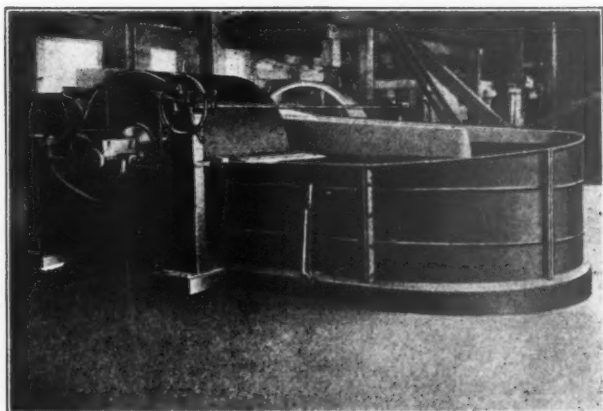
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"Your Paper is made in your Beaters"

NEW TYPE

HIGH DENSITY

BETTER CIRCULATING



THE PROBLEM is "how to beat *more stock* into *better quality* with *less cost* for labor and power."

THE ANSWER is "the Dilts New Type, High Density, Better Circulating Beater, built with high tub and with the roll located toward the rear end."

We could re-
build your
Beaters to
our **NEW**
TYPE de-
sign —

Dilts
MACHINE WORKS, Inc. FULTON, N. Y.
EXPORT OFFICE - 15 PARK ROW - NEW YORK CITY

SOME 1928 ORDERS

Ohio Box Board Co. . . .	8
International Paper Co.	12
Gulf States Paper Corp.	6
Oswego Falls Corp.	4
St. Regis Paper Co.	8
Mobile Paper Mills	2
Consolidated Paper Co. . . .	6
And Many Others	

"Your Paper is made in your Beaters"

When writing to DILTS MACHINE CO. please mention PACIFIC PULP & PAPER INDUSTRY

CHAMPION



FOURDRINIER

During more than a half century of pioneering Black-Clawson has never sponsored a piece of machinery without first making certain that it was right in every respect.

That is why Black-Clawson has come to be looked upon as a conservative organization and one that never speaks until it knows what it is talking about or moves until it knows where it is going.

And so, when the Champion Four-

drinier was developed, embodying many advanced features not found elsewhere, the opinion was freely expressed throughout the Industry that the Champion would unquestionably mark a long stride forward in construction and results.

That this early opinion was well founded is now borne out by the fact that every Champion installed has lived up to every confidence in its performance.

The Black-Clawson Company
Hamilton, Ohio

Shartle Brothers Machine Co., Middletown, Ohio

Export Offices: 15 Park Row, New York City

Builders of Highest Quality Paper and Pulp Mill Machinery
Patentees and Sole Builders of Vertical Dryers and Champion Fourdriniers

BLACK-CLAWSON

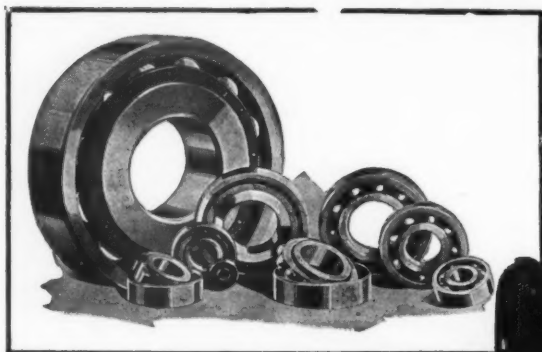
Champion



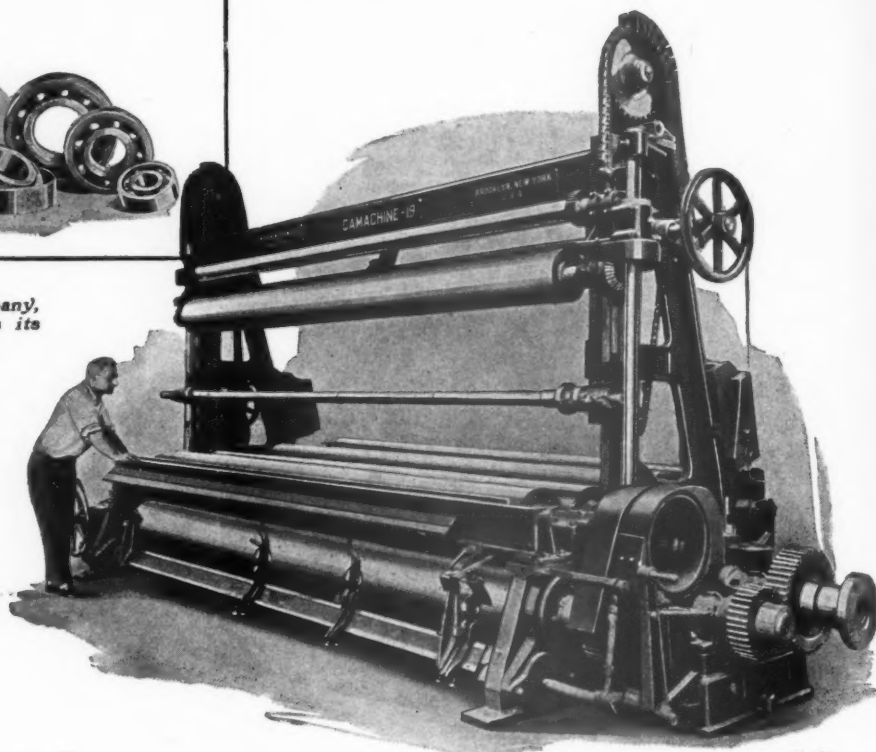
Fourdriniers

Built with Machine-Tool Accuracy

When writing to BLACK-CLAWSON Co. please mention PACIFIC PULP & PAPER INDUSTRY



The Cameron Machine Company, Brooklyn, New York, equips its Type 19 "Camachine" (here pictured) with "NORMA" Precision Ball Bearings, "HOFFMANN" Precision Roller Bearings, and "NORMA" Ball Thrust Bearings.



N-41

BEARINGS must be correctly selected and applied for the purpose in hand. No one type of bearing is "the best" for all conditions. The comprehensive "NORMA-HOFFMANN" line makes it possible for manufacturers to secure (as in the machine pictured above) the advantages of "PRECISION" Quality for every type of bearing service—whether speedability, or loadability, or both in combination, are sought.

Write for the Catalogs—or let
our engineers work with yours.

NORMA-HOFFMANN BEARINGS CORPORATION
STAMFORD, CONN. - - U.S.A.

Precision Ball, Roller, and Thrust Bearings

NB-905

Ball
Bearings
for
Speed
Service

- NORMA -
HOFFMANN
PRECISION BEARINGS

Roller
Bearings
for
Heavy
Duty

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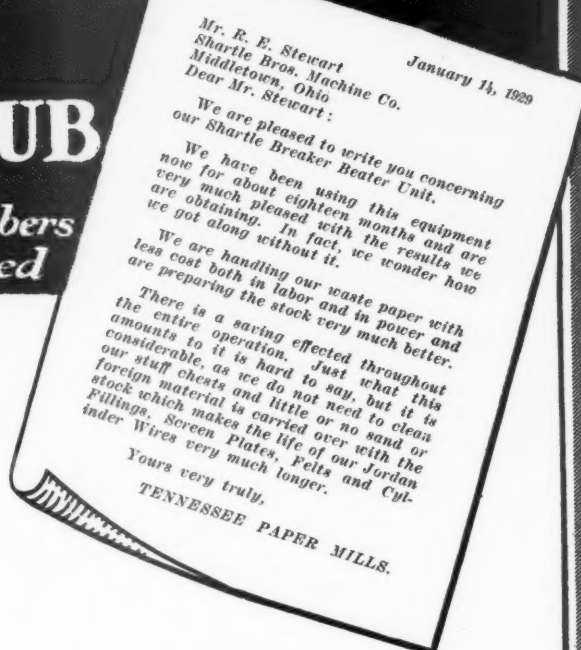
TENNESSEE PAPER MILLS

Joins the BREAKER CLUB

*Other Enthusiastic Members
Total About One Hundred*

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Co.

If you are interested in a Breaker other than a Shartle, we challenge you to write some of the above mills and ask them to tell you of their experience with a Shartle Breaker and with Breakers of other makes. Enough said.

SHARTLE BROTHERS MACHINE CO.

MIDDLETOWN, OHIO

Export Office: 15 Park Row, New York City

SHARTLE BROTHERS

DIVISION OF THE BLACK-CLAWSON COMPANY



A New Drive for a New Mill

ESMUND President
WM THINOLE Vice President



Tumwater Paper Mills Co.

PAPER MANUFACTURERS

ALL ORDERS ACCEPTED SUBJECT
TO UNAVOIDABLE DELAYS

Tumwater, Wash.

November 16, 1927

Allis-Chalmers Manufacturing Company,
Seattle, Washington.

Gentlemen:

Our new plant entered on a production basis October 17, and we are pleased to hand you negatives of Texrope Drive on our beaters, in connection with your roller bearing motors. We have four of the Dilts New-Type 2,000 pound Beaters, manufactured by the Dilts Machine Company, each driven by Allis-Chalmers LJO HP 495 Revolution motor.

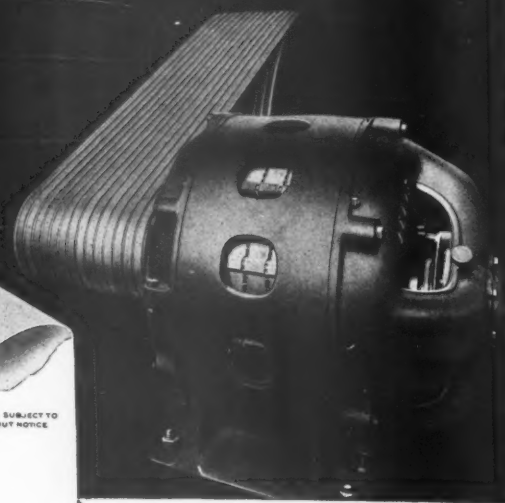
We wish to congratulate you upon these drives, covering, as they do, so wide a range of increase or reduction in speed, simplicity, close centers, silent and efficient operation. They will run forward or backward. They have called forth much favorable comment, and many wonder how they can work without any tighteners, how the different Texropes equalize the work. These puzzles do not concern us, since they accomplish their work as nearly perfect as we believe is mechanically possible. We cannot speak too highly of this modern installation.

Very truly yours,

TUMWATER PAPER MILLS COMPANY

President.

TG:H



Allis-Chalmers Roller-Bearing Motors and Texrope Drives are an unequalled combination.

Qualities of the Texrope Drive are:

"—simplicity, close centers, silent and efficient operation."

Allis-Chalmers Motors equipped with Timken Tapered Roller Bearings require attention only a few times a year.

Write for Bulletins on Allis-Chalmers Motors, Texrope Drives and other products for the Pulp and Paper Industry.



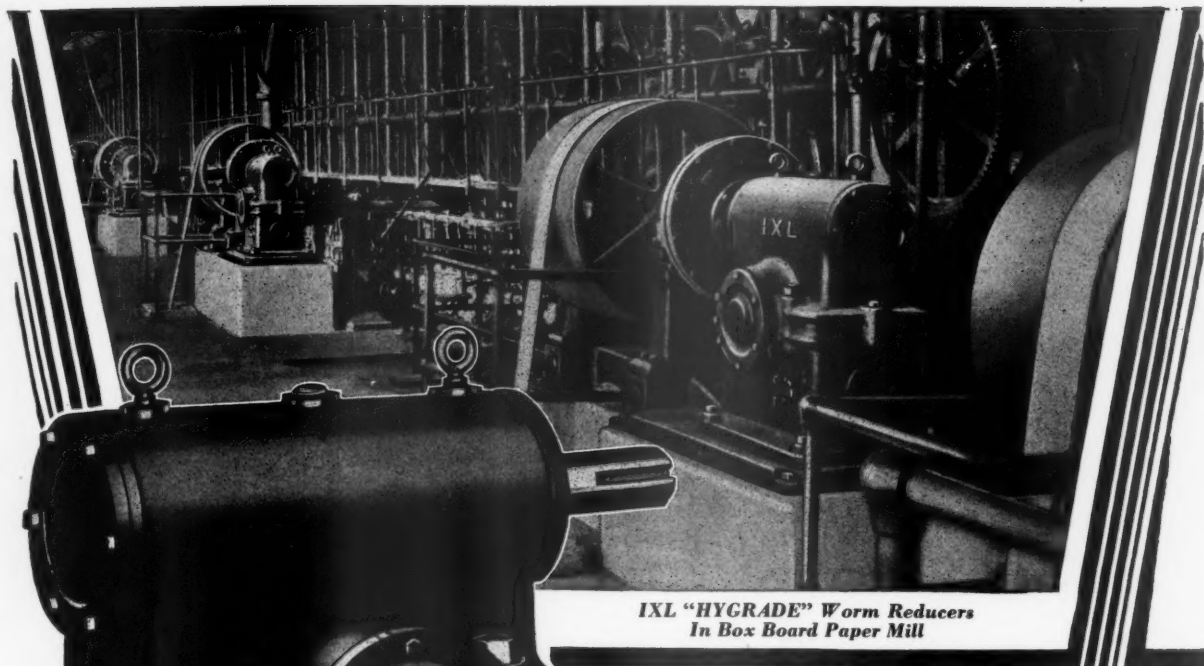
A Combination Unequalled!

ALLIS-CHALMERS MANUFACTURING COMPANY, Milwaukee, Wisconsin

ALLIS-CHALMERS MOTORS and TEXROPE DRIVES

PACIFIC COAST OFFICES: Rialto Building, San Francisco, Calif.; 622 Title Insurance Building, Los Angeles, Calif.; 115 Jackson Street, Seattle, Wash.; 505 Lumbermen's Building, Portland, Ore.; 325 Symes Building, Denver, Colo.; 915 Kearns Building, Salt Lake City, Utah; 308 Heard Building, Phoenix, Ariz.; 619 Frost National Bank Building, San Antonio, Texas.

When writing to ALLIS-CHALMERS MFG. CO. please mention PACIFIC PULP & PAPER INDUSTRY



IXL "HYGRADE" Worm Reducers
In Box Board Paper Mill

making a tough job easy with the IXL "HYGRADE" Paper Mill Drive

**Gears of
all Kinds**

**Friction
Clutches**

**Flexible
Couplings**

Transmission Equipment

FOOTE BROS. GEAR & MACHINE CO.

220-230 No. Curtis St., Chicago

Sales and Engineering Offices in all Principal Cities, U. S. A. and Canada

Western Sales and Engineering Offices—Fulton Engineering Co., 620 American Bank Bldg., Los Angeles, Calif.
F. Somers Peterson Co., 57 California St., San Francisco, Cal. Woodbury & Wheeler, 55 Second St., Portland,
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EXTENSIVE savings in costs of operation and avoidance of expensive shut-downs have amply justified the good judgment of the engineers that selected these IXL "HYGRADE" Paper Machine Drives.

It will pay you to get full details of their advantages, specifications and prices—all contained in IXL "HYGRADE" Reducer Catalog No. 300.

This book gives complete information on the entire line of IXL Hygrade Speed Reducers, as well as valuable engineering data.

Free to executives. Send for it.



Established 1859



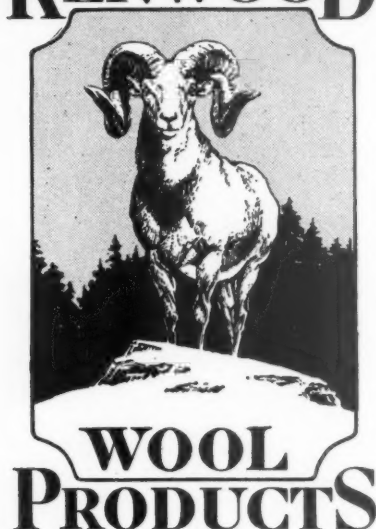
**FOOTE
BROS.
GEAR &
MACHINE CO.**
220-230 N. Curtis St.
CHICAGO, ILL.

*Please send me a copy of
Catalog No. 300 on Hygrade
Speed Reducers.*

Signed _____

Address _____

PACIFIC PULP & PAPER INDUSTRY

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RESULTS

Scientific selection of wool—basically sound design plus the added advantages of Kenwood Processes, produce a Felt which gives these results—Strength, Openness, Finish and Long Life. Strength for the hard pull—Openness for the high speed—Surface for the best finish—Basically Sound Design for Long Life.

Because of the above characteristics

KENWOOD TANNED FELTS

afford not only continued High Production but definite economies.

F. C. HUYCK & SONS

KENWOOD MILLS, ALBANY, N. Y.

KENWOOD MILLS LTD. ARNPRIOR, ONTARIO

When writing to F. C. HUYCK & SONS please mention PACIFIC PULP AND PAPER INDUSTRY

it's *new*



a Doctor

you can adjust with a
screwdriver!

AT LAST—THE PERFECT DOCTOR.

Now you can equip your breast rolls, press rolls, dryers, calenders—everywhere a doctor is needed—without filing—without peening and without scoring the rolls. Old rolls, new rolls, wet or dry—this doctor can be adjusted to fit them all—and the only tool you need is a screwdriver.

The doctor blade is of thin metal, suitable for the roll it is to clean. This flexible blade is reinforced with two specially formed leaves of spring steel. A series of patented pressure washers can be so placed as to increase or decrease the pressure at any point of contact.

Perfect contact all across the roll with minimum added load. Hand and electric control. Write for blue prints and full particulars. Let us quote on a complete installation.



PATENT APPLIED FOR.

Laminated

FLEXIBLE DOCTOR

with adjustable blade

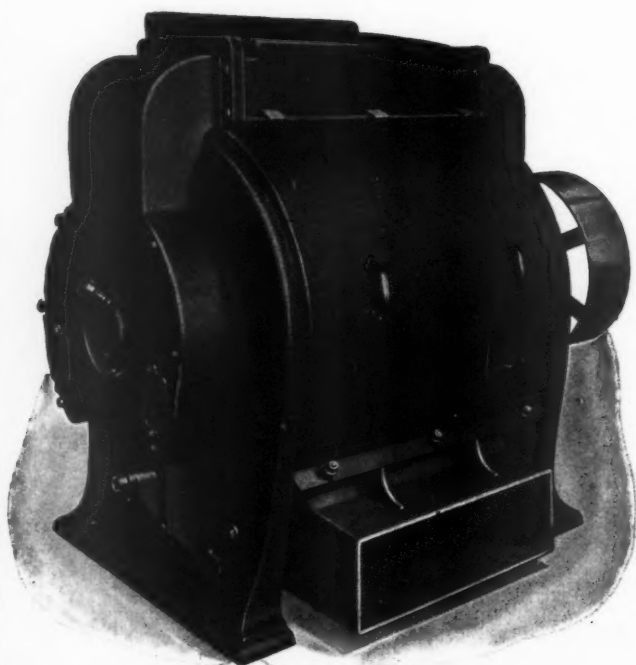
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REED-SPAFFORD

Pulp Screen

For Ground Wood, Sulphite, Soda or Kraft Pulp



Built in Two Sizes

A Large Number
of Reed-Spafford
Pulp Screens
Are in Daily
Operation in
Pacific Coast
Pulp Mills

The REED-SPAFFORD PULP SCREEN is remarkably efficient. Its capacity is large and its power consumption is surprisingly low. Let us show you what a saving this screen means to you.

Improved Paper Machinery Company

NASHUA, N. H., U. S. A.

SHERBROOKE MACHINERY CO., Limited
SHERBROOKE, CANADA

FEWER

Expensive Shutdowns *in* Paper Mills

WESTINGHOUSE truck-type switchboards improve continuity of service. They minimize and reduce shutdowns particularly expensive in paper mills, because a spare truck can quickly restore normal service. Many industries today are capitalizing the use of Westinghouse trucks.

Some of the many good features of these trucks are: Complete assembly and testing at the factory, assuring quick installation and immediate, satisfactory operation.

Typical Westinghouse Switchboard of the Horizontal, Draw-Out Truck-Type.



All trucks of the same type and rating are interchangeable thus making the purchase of one spare truck sufficient to maintain service at all times on several circuits.

Complete isolation of all live parts assures greater safety for attendants; and accessibility of trucks when drawn out decreases inspection and maintenance costs.

At our nearest office is a switchboard specialist who will be glad to give you more complete information.



Westinghouse Electric & Manufacturing Company
Los Angeles San Francisco Seattle

Westinghouse

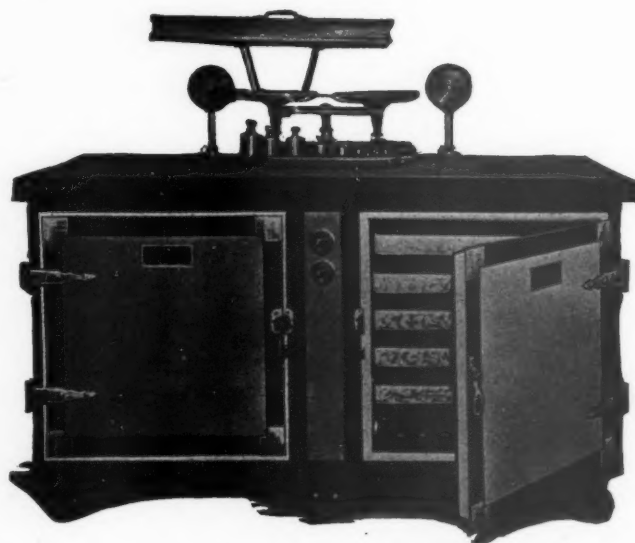
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When writing to WESTINGHOUSE ELEC. & MFG. CO. please mention PACIFIC PULP & PAPER INDUSTRY

*Accurate Equipment for Testing the Moisture of Your
Pulp Will Save You Thousands of Dollars*

THE WILLIAMS STANDARD PULP TESTING OUTFIT

Conforms in every detail with the Official Method for the Sampling and Testing of Pulp as approved by the Technical Association of the American Pulp and Paper Industry, the Canadian Pulp and Paper Industry, the American Woodpulp Importers Association, etc.



*New Horizontal Model
Work-Table Top, Separate Compartments, Quicker Drying*

FEATURES

OVEN—Double walled, electrically heated, with thermostat control.

SAMPLE TRAYS—Removable for weighing hot samples while covered.

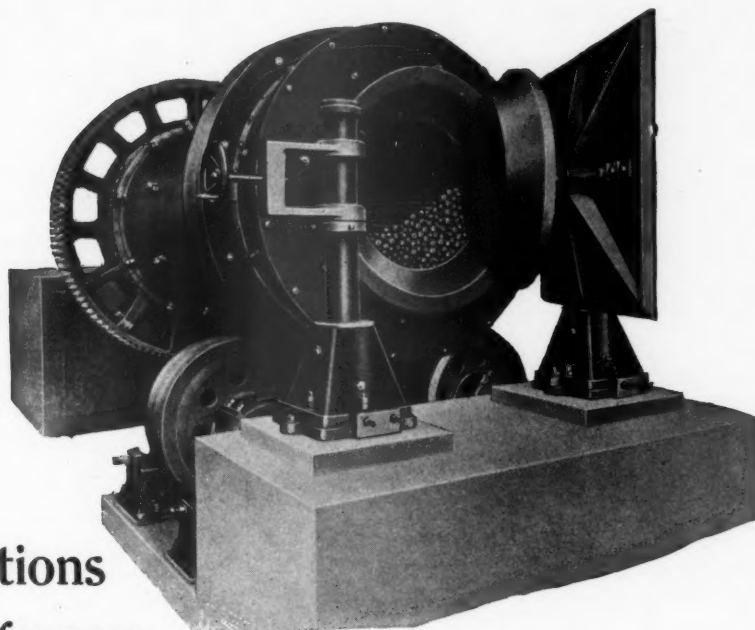
THERMOMETERS—High grade six-inch dial form, one in each compartment.

SCALES—Accurate balances with brass weights, counterpoised tray holder and cover.

It will pay you to write today

THE WILLIAMS APPARATUS CO., Park Place, Watertown, N.Y.

When writing to WILLIAMS APPARATUS CO. please mention PACIFIC PULP AND PAPER INDUSTRY



**Sound Theory
Successful Operations
*Enthusiastic Preference***

**. . . . the story of three successive installations
of Marcy *Open End* Rod Mills in one Plant**

ABOUT two years ago, a Marcy *Open End* Rod Mill was installed in a certain mid-western plant. Sound theory plus large scale laboratory tests sold this unit.

Some months later, a second unit was ordered. Definite improvements in beating brought about the installation of this second unit.

And last fall when the question of improving the beating of rags came up, the Marcy Rod Mill was the logical choice. There was no question about it.

The Marcy *Open End* Rod Mill has earned its place in every plant using beating and refining.



**The MINE and SMELTER
SUPPLY COMPANY**

NEW YORK

DENVER

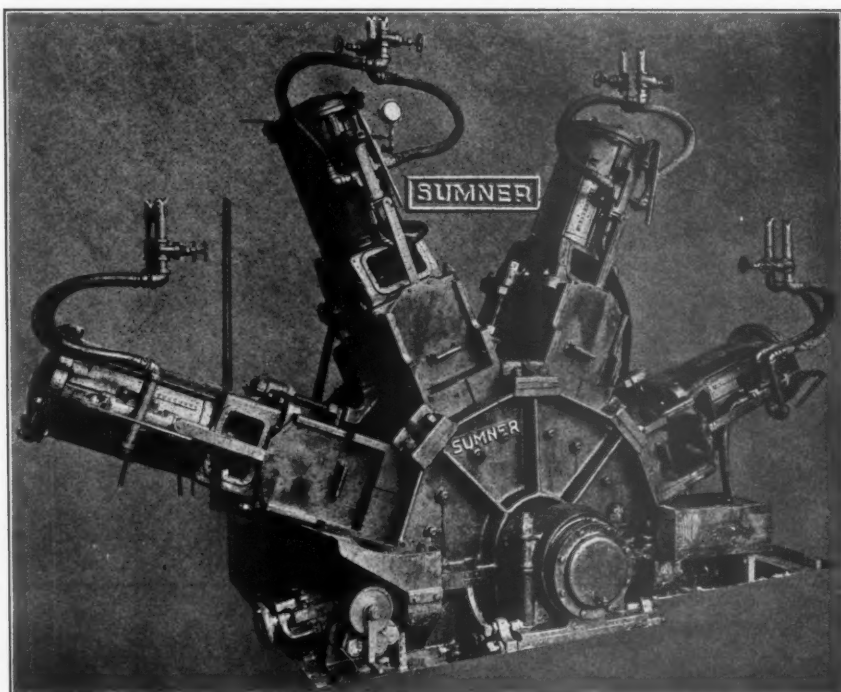
Licensee under the Marcy Rod Mill Patents

Manufactured in Canada by William Hamilton Limited,
Peterborough, Ontario

SUMNER

Four Pocket Pulp Grinders

The Same Now in Operation in the Columbia River Paper Mills, Vancouver, Washington



Machine is of heavy design having rigid webbed sides on large base.

Cylinders are 16-inch bore, brass-lined and are fitted with special three-way valves.

Pistons have special flexible joint connection to rods and pressure feet.

Pockets are adjustable by large bolts to take up for wear on stone, and openings are provided with sliding steel doors.

Arbors are of forged steel fitted with case steel flanges with bronze screw bushings.

Bearings may be furnished either lined with babbitt or lignum vitae or fitted with heavy duty Hyatt Roller bearings.

Grinder is fitted with geared screw device for turning stone.

We also build other machinery for pulp mills and chip plants.

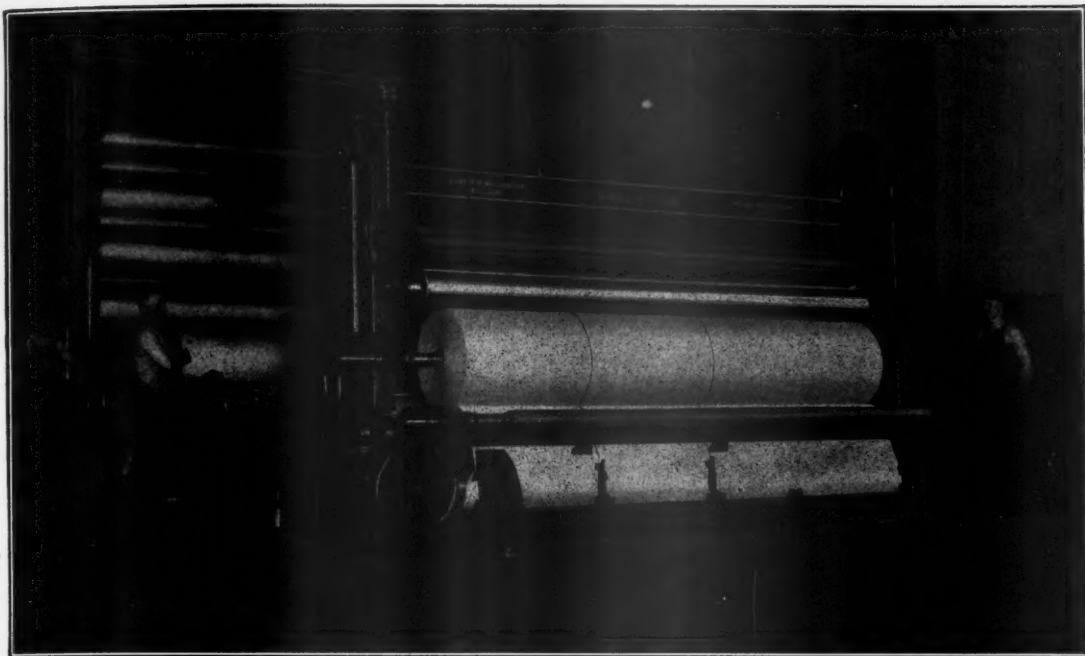
Let Us Figure on Your Requirements

SUMNER IRON WORKS

Factory: Everett, Washington

Canadian Shops: Vancouver, B. C.

When writing to SUMNER IRON WORKS please mention PACIFIC PULP AND PAPER INDUSTRY



TO WITNESS THE PERFORMANCE OF A CAMACHINE IS TO KNOW ITS MERITS

The true test of CAMACHINE'S efficiency and aptitude to fill all requirements in slitting and roll-winding is likened to any other type of machine, and that is by actually seeing one in operation. Better still is it to judge the choice of a machine by comparing contemporary types of machines in order to determine their values to meet a veritable need.

So sure are we to prove that a CAMACHINE will fill any roll-winding requirements, we cheerfully offer to install a CAMACHINE without any obligations, and would preferably have it demonstrated under these conditions.

***Compare CAMACHINE Performance with Others and
Let Your Own Judgment Be Your Guide***

Write Us for Particulars

**CAMERON
MACHINE COMPANY**

61 POPLAR STREET BROOKLYN, NEW YORK

When writing CAMERON MACHINE Co., please mention PACIFIC PULP AND PAPER INDUSTRY.

➤ RIVETLESS ◀ CHAIN Ideal for Refuse Conveyors

LOW cost, simplicity, strength, flexibility, and light weight, as well as its ability to withstand shocks and resist abrasive wear and corrosion, make the use of ➤ RIVETLESS ◀ Chain unexcelled for refuse conveyors.

Shown here is one of our hogged fuel handling installations, that of the Powell River Company, Ltd., Powell River, B. C., using two strands of No. 678 ➤ RIVETLESS ◀ Chain with swivel flight attachments and wood flights every 36".

Link-Belt ➤ RIVETLESS ◀ Chain consists of a center link, side bars, and pin; and may be quickly assembled or detached by hand, without tools or mechanical aid. Send for Folder No. 755.

LINK-BELT COMPANY 3855
Leading Manufacturers of Elevating, Conveying,
and Power Transmission Chains and Machinery
CHICAGO INDIANAPOLIS PHILADELPHIA

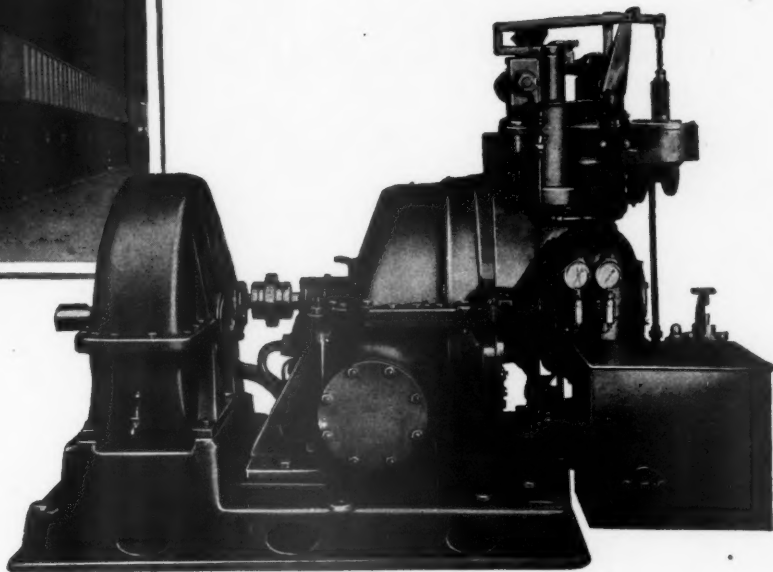
LINK-BELT MEESE & GOTTFRIED COMPANY

San Francisco, 19th and Harrison Sts.
Seattle, 820 First Ave. So. Los Angeles, 361 S. Anderson St.
Portland, Ore., 67 Front St. Oakland, 526 Third St.

LINK-BELT
17696

LINK-BELT

A turbine drive *accurate to a fraction of one per cent*



Speed variation averaging only a fraction of one per cent at any point over a wide range—that's the service available in the G-E mechanical drive turbine with its ingenious governor mechanism.

Almost constant speed over a wide range means efficient operation, no underweight or overweight stock—and it means over-all economy.



Where the back line can be discarded with no great loss, or where the installation of new paper machines is contemplated, specify G-E sectional drive. Each year, General Electric installs the largest number of new sectional drives on this continent.

This turbine supplies plenty of clean steam for your driers—more economy. Week-end installations have been made with no loss of production; present back lines can be used.

Your nearest G-E office can supply you with detailed information about this drive. Write or phone.

GENERAL ELECTRIC

175-24

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN PRINCIPAL CITIES

When writing to GENERAL ELECTRIC CO. please mention PACIFIC PULP AND PAPER INDUSTRY

"M & W" Rotary Screen

*with important
new features*

Divided Diaphragms. Each diaphragm is divided into two sections, which move in opposite directions. The resulting balanced movement avoids all side strain on the cylinder, requires less power, and increases the screening capacity.

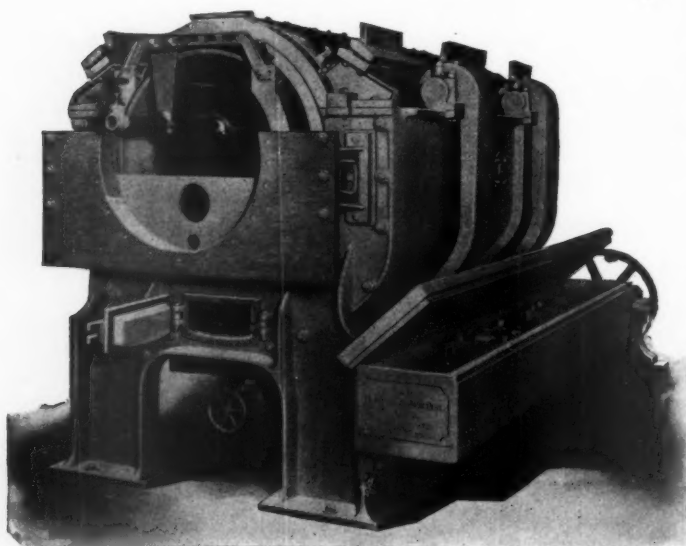
Discharge Openings at both ends of cylinder are much larger.

No Dead Stock in Cylinder. Improved discharge of stock from both ends of cylinder to flow box.

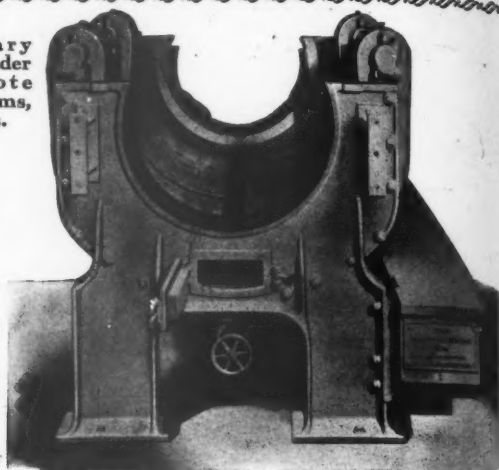
No Dead Stock in Vat. Pockets are prevented by diaphragm action and automatic flushing outlet.

No Packing Troubles. It is impossible for lumps to get into screened stock.

Note enclosed and accessible main drive, showerpipe, washout door for cleaning.



View of Rotary Screen with cylinder removed. Note divided diaphragms, large openings.



The "M & W" Rotary Screen now being placed on the market has been redesigned and built from practical paper mill experience. Recent improvements are fully covered by United States and Foreign Patents.

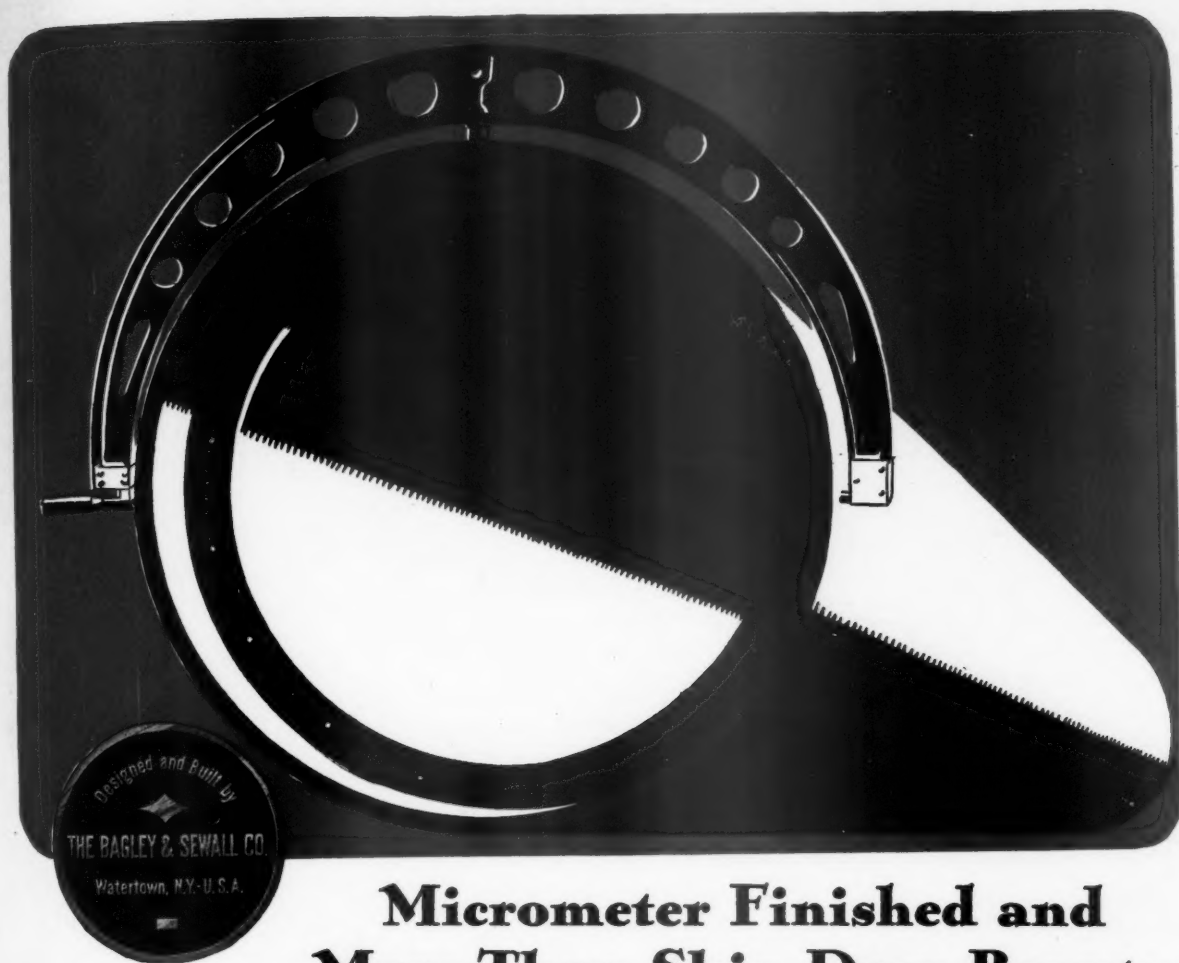
Self-Oiling Bearings. Shaft bearings and eccentrics are self-oiling, enclosed and protected from water.

New Shower Pipe—the Moore & White "Criss Cross" pipe that clears the screen plates so effectively.

**Increased Capacity —
Less Power — Reliable
Operation at Low Cost**



WRITE FOR NEW SCREEN BOOKLET



Micrometer Finished and More Than Skin Deep Beauty

The mirror surface of a dryer is not the only factor in making a perfectly dried sheet. Absolutely uniform heat distribution is essential — and Bagley & Sewall achieves this by machining the inside of the rolls to a high degree of finish. Drying rolls of every desirable size up to 25 feet long, uniform in shell thickness throughout their entire length. Truly a mechanical achievement—yet a matter of regular shop practice in maintaining Bagley & Sewall standards. Special facilities, special tools, specialized skill produce ideally finished, perfectly balanced rolls at prices comparable with the cost of ordinary ones.

There's more we'd like to tell you about them—write us.

The Bagley & Sewall Co.

Watertown, N. Y.

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FOURDRINIER—CYLINDER—WET MACHINES

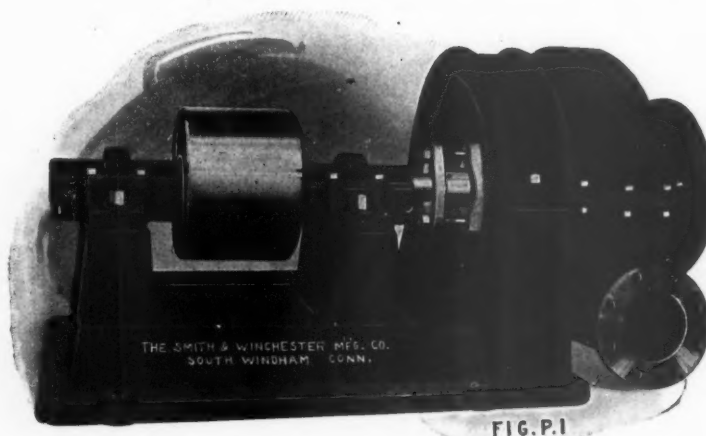
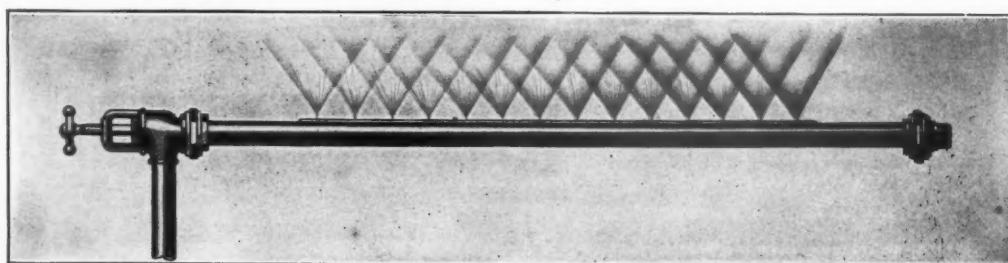


FIG. P.1

Our Fan Pump for Paper Mill Use

The Undercut Trimmer

PAPER BAG MAKING MACHINERY



The Rainstorm Shower Pipe

—ESTABLISHED 1828—

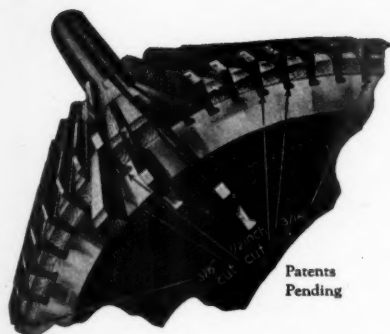
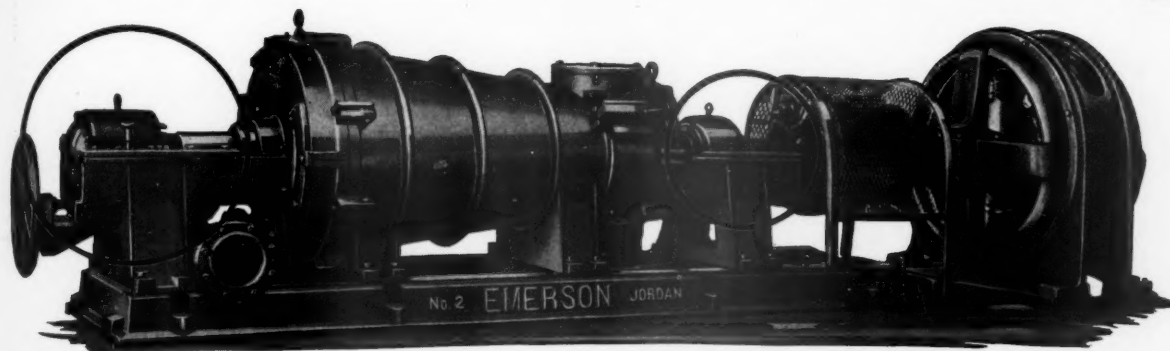
The Smith & Winchester Mfg. Co.

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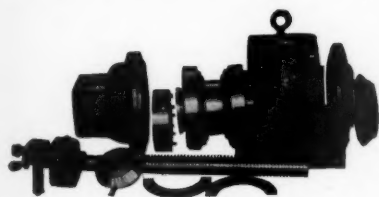
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The EMERSON JORDAN *equipped with the* Bolton **BANDLESS** Plug



Showing construction of the Bolton Bandless Plug. Knives and woods cannot come out. **NOTE INVERTED WEDGES.**



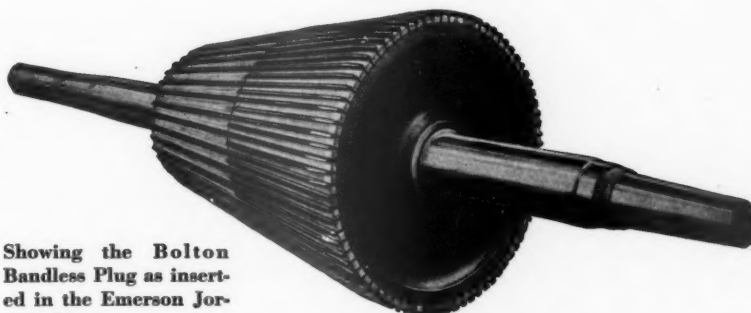
Detail of Timken end bearing which takes care of both radial and thrust.

Now every Emerson Jordan offers you the tremendous advantages of the Bolton **BANDLESS** Plug and Timken Roller Bearings.

These two great features put the Emerson Jordan in a class by itself for unit control, lasting satisfaction and true economy. No other Jordan has these great construction advantages.

Make sure of all the benefits and savings that result from these two wonderful improvements in Jordan engineering. Standardize on Emerson Jordans.

Write for full information and estimates



Showing the Bolton Bandless Plug as inserted in the Emerson Jordan above.

The EMERSON MANUFACTURING COMPANY
LAWRENCE ~ ~ ~ MASSACHUSETTS
DIVISION OF JOHN W. BOLTON & SONS, Inc.

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THE PACIFIC COAST JOURNAL FOR PRODUCERS, CONVERTERS,
AND DISTRIBUTORS OF PULP, PAPER, AND BOARD.

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Vol. 3

APRIL, 1929

No. 5

The Battle of the Olympics

An article in which is set down without
favor the factors entering into one of
the greatest timber struggles of all
time to answer the questions—

Who's in it?
and Why?

THE battle of the Western Olympics is on. The prize is the greatest and last stand of virgin timber in America, 42,212,000,000 feet b. m., standing on federal forest reserve, state, Indian or private lands. Of this vast stand some 26,500,000,000 feet b. m., or 44,000,000 cords, are pulpwood of the preferred pulping species, Sitka spruce, Western hemlock and white fir. With the opening of this "last great reserve" where pulpwood predominates to the extent of 60% or more of the total stand, it is certain that pulp mills will have to be a part of the picture unless the greatest of economic crimes is to be permitted, namely, logging this area for saw logs alone.

For the past several years the timber giants have been creeping closer, closer, closer to this great timber reservoir. All knew that these trees must fall before the axe some day, but there was no hurry about it with the lumber market glutted and prices down where only the cream of the logs could pay their way out of the woods to some utilization.

Take the Olympic Peninsula as a land apart. Here is a geographical unit with famous Olympic Mountains set down in the very middle. Puny man with his logging outfits has been forced to go around this natural barrier. They have been working the timber on

the eastern slopes, have the loggers. They have pushed their rails along the northern slopes, paralleling the Straits of Juan de Fuca, and lately have started to bend these rails toward the south, pointing them into this vast field of timber contest. Meanwhile the timber on the southern slopes has given way even more rapidly before the onslaught of the logger and here the rails have poked into the north out of Grays Harbor.

You can't go through the Olympics. To get at that 42 billion feet on the western slopes you have to go around; in from the north from the Port Angeles country or up from the Grays Harbor country on the south. There are no harbors on this strip of coast. The logs must go out by rail. Thus have the timber giants eyed one another, watchful respect at a gentlemen's game, thank you, but each keenly alert for the first move of his neighbor.

Thus has smoldered the fire which has been fanned into flame by the rapid fire happenings of the past three weeks. Now, as one big operator has voiced it, "If there's to be a fight, we don't want to be overlooked."

Up until now the situation in the Olympics has been this. Bloedel-Donovan, with 1000 men in the woods

and bringing out 300,000,000 feet b. m. annually to tidewater on the Straits of Juan de Fuca on the north, with 80 miles of logging road reaching into the timber of the northwestern corner of the Olympics, pointing south from their salt water log dump at Clallam Bay, have held a strong grip on the northern end. But they have not been alone in the north. During the war the government built the "spruce road" into this same area westward from Port Angeles. Later this road fell into the hands of the Lyon & Hill interests, was incorporated as a common carrier a year or so ago and got tangled up with the Bloedel road over right-of-way questions. Early this year Joe Irving of Everett and Crescent Logging Co. fame, one of Puget Sound's biggest loggers, with other associates, acquired the spruce road and incorporated it as the Sol Duc Investment Co., tossing a little kindling into the fire by announcing that one of the first moves would be to extend the road some nine miles to the town of Forks in far southwestern Clallam county.

Still another factor in the north was the Milwaukee railroad reaching out some 40 miles to westward from

and, second, T. D. Merrill, of Merrill & Ring, important loggers in the northern part of the peninsula and associated with Joe Irving in the ownership of the spruce road, is also an officer of the Polson Logging Co.

Viewing Alex Polson's strategic position with not too much relish has been another group of Grays Harbor interests who have been putting forth mighty efforts to get another railroad into that timber of the western Olympics. During the recently adjourned session of the Washington state legislature this group fostered the Finch bill which was drafted to permit the Port of Grays Harbor to build a common carrier railroad north from Grays Harbor at public expense. The bill did not pass.

Then the Northern Pacific and the Union Pacific, two transcontinental lines entering Grays Harbor, announced on April 4 to an interested world that they would combine and build a 60-mile extension north from Grays Harbor at a cost of some \$60,000,000 and they would haul out the logs. This was really the spark that put the smoulder into flame. Backers of the defeated Finch bill said that the N. P.-U. P. road would serve even better the proposal for which the Finch road was designed.

Another bit of tinder must be mentioned before the picture "as was" is completed. Grays Harbor, as a community, realizing that the time of timber exhaustion was approaching and desiring to find a backlog for the perpetuation of its extensive wood-using industries, drew up a lengthy document and filed it as a brief with the U. S. Forest Service in March, asking that some 18,000,000,000 feet b. m. of the 26,000,000,000 feet b. m. in the Olympic National Forest be allocated to Grays Harbor.

What will be done with the vast pulpwood stands of the Western Olympics? Here is a question that reaches beyond merely the adjacent communities, beyond the loggers, railroads, lumber interests which tap the region directly. Here is a question that touches every man whose business welfare responds to the general business welfare of the Pacific Coast. The Pacific Coast has a most valuable heritage in these Western Olympics. It faces now the choice of frittering away or utilizing to the maximum. Because of the wide and deep-rooted interest in this question of opening the Western Olympics **PACIFIC PULP & PAPER INDUSTRY** in this issue has been liberal with space devoted to discussion of the question. In this issue are presented four companion articles on the Western Olympics. The first is a disinterested account of the factors entering directly into the Western Olympic struggle. The other three are statements coming from men of such prominence in the lumber and business world of the Pacific Northwest that they need no introduction.

Port Angeles, but not yet quite far enough out to poke a threatening spur to the south. However, none less than President Scandrett himself, of the Milwaukee, has looked over that western Olympic area in the past 18 months and just what is in the Milwaukee plan storehouse is not exactly known.

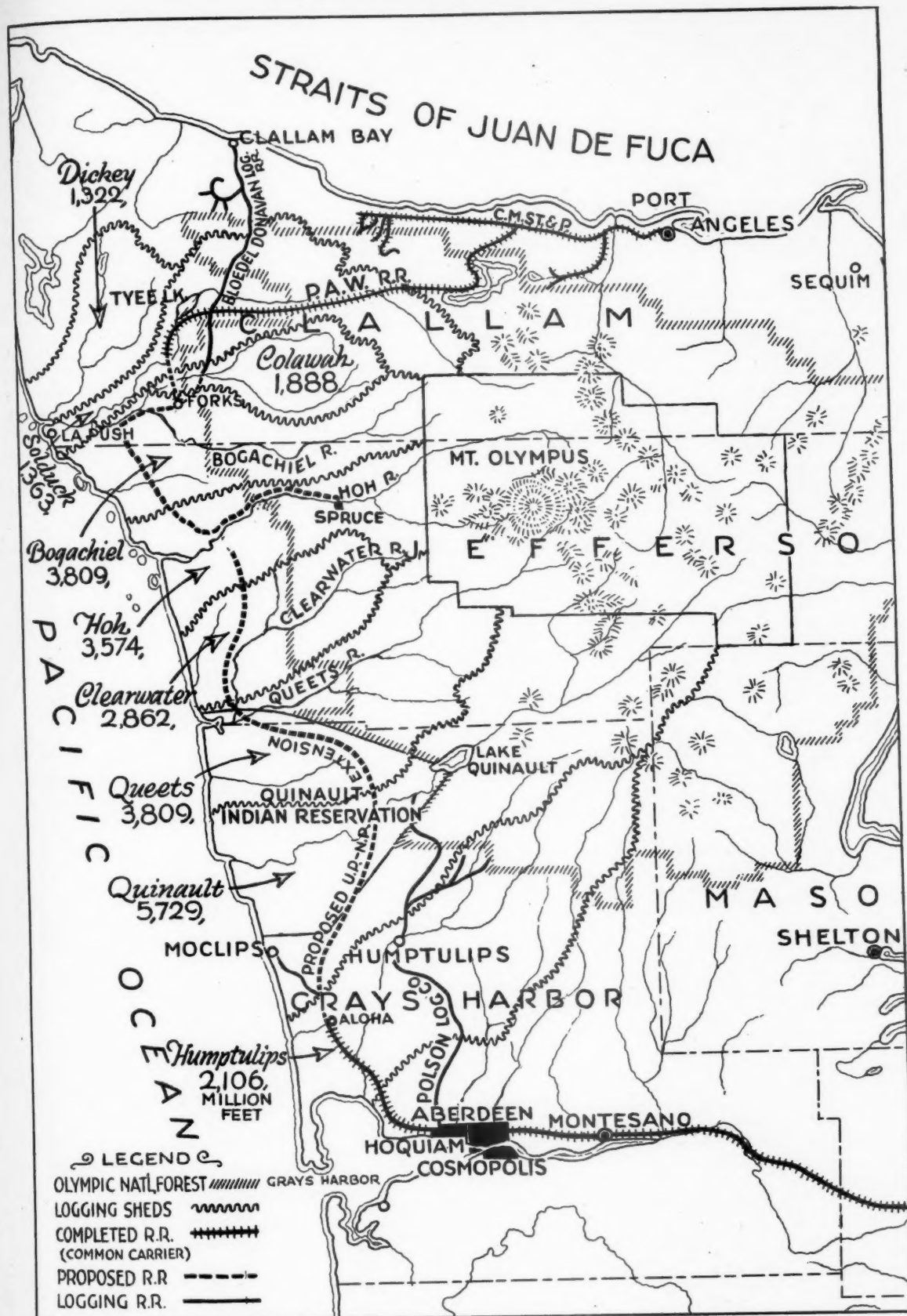
In the meantime, turning our eyes to the south and to Grays Harbor we find a community of some 60,000 souls comprising one of the biggest wood-using centers found anywhere. The economic life of Grays Harbor with its many lumber mills, woodworking factories, pulp and paper mill and the many logging camps back of it rests practically 100% upon the forest.

Here in Grays Harbor Alex Polson has been sitting tight on the western Olympic situation with his own logging road stretching northward from Grays Harbor through Humpulips to the vicinity of Lake Quinault. Without question his has been a strategic position. Further points of interest here are: the Polson interests are very closely allied with the district's only present pulp mill, the 150-ton Grays Harbor Pulp & Paper Co.,

WHAT THE MAP SHOWS

Between Forks on the north and Lake Quinault on the south there is nothing at present but primeval wilderness. On the south the Polson Logging Railroad is seen to reach farthest north at present. The route of the proposed Northern Pacific-Union Pacific railroad extension is shown in the dotted line reaching north from Aloha. On the north the Port Angeles Western Railroad, or "government spruce road", which is now controlled by Joe Irving and associates, is shown reaching down to Forks. Just what the plans are beyond that point are at present not announced. Crossing the Irving road is the Bloedel-Donovan Logging Railroad, now within three miles of Forks, which is to be extended as shown across to the Hoh river and up that stream to Spruce. The mountainous area within the Olympic National Forest effectively cuts off the Western Olympic Peninsula from entry except by rail from the north or from the south. There are no suitable harbors between Port Angeles and Grays Harbor. Logging operations must follow the topographical dictates of the watersheds. These logging sheds are indicated by the wavy lines, with the number of million feet of pulpwood for each logging shed shown in each case. Outside of these sheds the reserve contains additional pulp timber to the amount of 2,891,000,000 feet, adjoining pulpwood stands in private timber amounting to more than nine billion feet. The watersheds shown include only those entering the Olympic reserve. Smaller watersheds below the reserve have been included in the larger ones shown, one-half of the timber of each of these smaller sheds being added to the each adjoining major shed.

In asking this the Grays Harbor group reached up that western slope as far north as the Colowah, which was entirely too far north for the operators on the northern side to believe was reason. Their idea is more that the thing should be something about 50-50, not



less, and some say the dividing line should be even nearer the Grays Harbor than to the Straits of Juan de Fuca, but be that as it may, the Grays Harbor request put a thorn into the side of the Port Angeles people and they are now working on a brief of their own which is designed to show the forest service why the Grays Harbor allocation is much too far north.

In the meantime the Indian bureau is offering four large timber units, each comprising approximately 450 million feet b. m., running heavily to the pulp species, in the Quinault Indian Reservation, which lies between Lake Quinault and the sea in a triangular strip at the southern edge of the western Olympics. The contracts contain certain provisions designed to encourage the use of the pulping species in the tracts. Four of the leading logging companies of the Grays Harbor district are now securing all or a part of their logs from the Quinault reservation.

Right on the heels of the U. P.-N. P. extension from Grays Harbor Joe Irving announced that construction crews were going right to work on that nine-mile extension to Forks. But few believe that the work will stop at Forks. The Irving road, being a common carrier, had some time ago acquired I. C. C. permission to build that extension and the only thing necessary was to bring out the pick and shovel. So, while the Irving track crew is laying down the rails to Forks the U. P.-N. P. combine with the Grays Harbor adherents must cool their heels while the I. C. C. decides whether this railroad extension is really necessary. It is possible that the I. C. C. may decide the 60-mile road isn't necessary since Joe Irving will be able to show a completed road down to Forks for one thing. Then there is also the fact that logging roads, while not common carriers, are required by law to haul logs from any timberlands passed through. And logs would be almost 100% of the freight on any railroad going into the western Olympics now.

The Irving announcement had scarcely got into the front page of the daily papers before Bloedel-Donovan announced that work was starting right away on a 29-mile extension of their road, which is already within three miles of Forks, through this town, down the Bogachiel, across to the Hoh River and up that stream to the very edge of the federal reserve to a spot on the map called Spruce.

Thus are deployed the troops in this great battle for the western Olympic timber as this issue goes to press.

Fitch Goes to Everett

After serving as superintendent of the Cascade Paper Co. for the past eight years, James I. Fitch, resigned recently and has taken a position as assistant superintendent of the Everett Pulp & Paper Co.

\$7,500,000 Pulp and Paper Mill?

Eleventh hour reports from Portland hint the establishment in that vicinity of a combination industry to include pulp and paper and to represent an investment of some \$7,500,000. As Dame Rumor has it the mill will manufacture kraft and will possibly tie in chemicals and electric power. Efforts to trace the rumor to definite sources brought no results although it was understood that the project was being slowed up due to conditions unfavorable in the securities market for securing some new capital.

Eight Best Pulp Chances

On the western slope of the Olympic Peninsula a number of large rivers form separate watersheds growing the heaviest stands of pulpwood on the Pacific Coast and in the United States. These slopes are subject to a greater precipitation than the balance of western Washington, the growth is rapid, and the area is practically immune from fires. The rivers originate in the snows of the Olympics and in their seaward course they form many falls and rapids which can be developed for power.

Accurate estimates of the timber in these watersheds are available for the timber within the forest reserve, but the private holdings can only be roughly estimated. R. R. Montell, consulting engineer of Seattle, who has made considerable study of the Olympic country, has compiled an estimate of the timber, private and reserve, on these several watersheds, taking as a base figure a stand of 47,000 feet per acre. Pulp wood is estimated at 50%. Mr. Montell states that this percentage is known to give a fair average for the whole, although it varies in the individual watersheds. On a sustained yield basis, based upon a growth of 1.75% per year of the present stand, which is considered very conservative in view of the rapid growth possible in the district, Mr. Montell estimates that these eight watersheds can support chemical pulp mills on a perpetual basis with a capacity of 380,000 tons per year. Below are the figures:

EIGHT BEST PULP CHANCES

	Stand of timber, 1,000,000 ft. B.M.		Stand of Pulpwood	Pulp Mill Capacity, Tons
	Private	Reserve		
Humtulpis	1,140	1,850	2,106	100
Quinault	6,290	3,400	9,690	270
Queets	3,140	3,110	6,250	190
Hoh	2,508	3,924	6,432	180
Clearwater	2,005	2,354	4,359	130
Bogachiel	2,098	2,899	4,997	180
Colawah	296	2,070	2,366	90
Solduc	1,390	1,093	2,483	64
Dickey	2,645	2,645	62
Totals	21,512	20,700	42,212	1,266

This stand of 26,462,000,000 feet b. m. or 44,000,000 cords of pulp wood in one solid block forms 34% of the total Spruce-Silver Fir-Hemlock stand in Western Washington, and it does not include the northwest corner of the peninsula with equally heavy stands of virgin growth, as much as 110,000,000 feet per square mile or 170,000 feet per acre having been found on areas as large as a square mile.

Olympic Forest to Improve Roads

About \$15,000 will be spent for construction and maintenance of trails and roads in the Port Angeles district of the Olympic National forest this year. The Port Angeles district includes all the national forest north of the Quinault river drainage area and west of a line drawn southward from McDonnell creek, a few miles east of the city of Port Angeles.

Crown Woods Operations At Full Blast

The Crown Willamette Paper Company's main camp in Wahkiakum county, near Cathlamet, is now called the Headquarters Camp, instead of State Camp as formerly. Three camps besides the Headquarters Camp are operated. The old Miners Camp is to be known as Camp No. 1, the Puddy operation as Camp No. 2, and the Gold Camp as No. 3. All are now running at full force, employing some 300 men.

Why Waste

The Pulpwood of the Western Olympics?

A Statement on the Effect
of Opening This Last Timber Stand

By ALEX POLSON

President, Polson Logging Co.

I HAVE your favor of April 5th and note what you say in regard to the Northern Pacific and the Union Pacific extending their railroads from Grays Harbor in the western portion of the Olympic Peninsula, being Jefferson and Clallam counties.

You ask what effect this will have on other roads. The answer is that the more railroads there are into the timber, the sooner it will be all taken off, and what is not taken off will become a total loss through fire and waste.

The government department which handles the Indian reservations is putting up all the land for sale on the Quinault reservation. This may be right, but my opinion is that it is too soon to put it up until such time as there is a market for the pulpwood, which there is not today, as the pulp plants already in are getting nearly a full supply from the of-fal from the hemlock mills. After the merchantable timber is taken out the small hemlock which is not knocked down will be blown down, as no timber in our western country can stand up against the storms after a break is made in the timber by cutting out a portion of the trees.

After the timber is cut off I cannot see any possibility of the Northern Pacific or the Union Pacific leaving their track down. In all probability they will pull it up, as it cannot pay. Before the days of the auto truck it would have been a different proposition, but that day has gone by and the auto truck is making further and more rapid advances than ever on the local freights formerly hauled by the railroads.

The road from Aberdeen to Ocosta is idle and the greater portion of it has been pulled up. The Union Pacific road into the North River country has only one logging outfit using it and they are contemplating paralleling this road and continuing their own road to tidewater. The Schafer Bros.* paralleled the Northern Pacific and the Milwaukee for about 30 odd miles. A private road can well afford to do this on account of the operations being very much more economical than the public roads.

It is a great mistake to build a road which has no possible chance of hauling anything but state and

federal timber. The amount of individually owned timber is very small. The greater portions of it are already owned by mills and logging companies, which have their own roads in the vicinity and are logging more rapidly than it should be logged, at that.

The timber in that country is principally hemlock. It would be over half hemlock if we could use the pulpwood, but there is no market for that at the present time and there won't be for some few years until we have more pulp mills or enlargements of those we already have.

But this argument is not considered by our chambers of commerce, which are made up principally of men not at all familiar with the lumber business and they think only of a public road running into a great forest to get the timber out, regardless of what the after effect will be. Apparently nothing will stop them, as they are not engaged in the lumber business and they think only "Hip hurrah! Let's go ahead!"

The greatest pulp country in the United States today, outside of Alaska, is from the Straits of Juan de Fuca to the Columbia River, running from 10 to 20 miles back. This is principally timbered by western hemlock and spruce. On account of the dampness of the ground it is very mossy and the Douglas fir will not start unless it finds mineral earth in which to start. If there is any good way of logging this slowly, in order that the pulp mills may come in, which they will, and make a market for this hemlock, it will be a wonderful thing for the state of Washington, for that is where the future pulpwood is coming from, if it is handled rightly.

Personally, as far as our company is concerned, we have timber enough for our own needs for a good many years. What we need is more pulp mills and a more scientific way of handling our Indian, federal and state lands if it is possible to do so. But if the great majority wish it to be taken off and the pulpwood wasted, which it will be if logged rapidly, there is nothing that a few people can do to stop it. Those who are working the hardest to get these additional railroads into the timber are people who are not interested personally in the timber, never have worked in the timber, and know little or nothing about the conditions of the timber belts.

If there is any good way of logging the Western Olympic timber slowly, in order that the pulp mills may come in, which they will, and make a market for the hemlock, it will be a wonderful thing for the state of Washington, for that is where the future pulpwood is coming from, if it is handled rightly.—

Polson.

*Schafer Brothers are among the largest timber holders, loggers and lumber operators in the Grays Harbor country.



IN THE VALLEY OF THE HOH RIVER

With the Opening of the Western Olympics These Giant Sitka Spruce Trees Are Perhaps
Soon Destined to Be a Part of Our Daily Newspaper

Safeguarding

The Pulpwood of the Olympic Peninsula

By FRANK H. LAMB

THE western portion of the Olympic peninsula comprises the greatest potential pulpwood supply in western United States. A recent compilation of timber estimates of the area south of the Calawah-Bogashiel watershed shows a total stand of 49,368 million feet. Many of these estimates were made several years ago, and it is reasonable to expect that there will be a considerable over-run. Of species demonstrated readily suitable for pulp and paper making, the total stand aggregates 25,496 million feet b. m.

Four different ownerships are involved in this vast stand of timber. First, private interests owning the fringe of uncut lands south and west of the boundaries of the Olympic National Forest. Second, the Quinault Indian Reservation in western Grays Harbor County, with a total estimated stand of 3,719 million feet, board measure, of which 1,636 million feet, board measure, are of possible pulp and paper making species. Third, the state of Washington holding approximately 160,000 acres of adjacent timber with a cut estimated at 6,000 million feet, of which 3,000 million feet may be classed as suitable pulp and paper material. Fourth, the Olympic National Forest, which on its western and southern slopes northward to the point indicated shows a total stand of 22,060 million feet, of which 15,618 million feet are pulp species. This gives us a total stand of pulp species in the publicly owned timber, including Olympic National Forests, state lands and the Indian reservation, of 20,254 million feet. It should be stated that these estimates, so far as pulp wood supplies are concerned, are under proper utilization grossly underestimated since they are mainly based upon utilization as logs, and take little consideration of small material and woods refuse which would eventually be utilized for pulp wood if not previously destroyed.

The proper allocation of this vast stand of publicly owned timber is of vital interest to the particular communities involved. This interest is perhaps immediate, and directly affects every resident and businessman. But another question involved in the future of the communities of the Olympic Peninsula and of interest to the people of the state of Washington generally is the utilization of these resources in such a way that the maximum value may be returned to the business of the state and their perpetuation secured so far as possible.

Under present conditions of ownership and taxation it is impossible to rely upon the private lands for a consistent handling that will keep them on a sustained yield basis. Unused laws of the State of Washington would permit the state assuming control and management of cut-over lands, and eventually would make them productive and protect our forest industries. Public opinion should insist upon carrying out the law. The Indian department in its handling of the Indian reservation lands takes the attitude that the timber belongs to the individual Indians, and that it is the duty of the department to realize upon it for the

benefit of the Indians as soon as possible. Consequently, during the month of May, the remaining stand of timber on the Quinault Indian Reservation will be sold. It would be too optimistic to anticipate the Indian department being able to handle the cut-over lands of the reservation in such a way that they might become a producer of sustained timber crops.

In our provision, therefore, for the future we are down to two classes of public ownership, namely, the timber of the Olympic National Forest and that of the state lands contiguous thereto. It is the announced policy of the For-

est Service to handle all its national forests on a sustained yield basis. It is to the interests of the future state that our people insist and see that this wise policy is fully carried into effect.

Present laws governing the disposal of state lands, framed primarily for the sale of the scattered sections 16 and 36 of every township, are totally inadequate when applied to a great tract such as the state owns in the Olympic Peninsula. No sales of these state lands should be made until proper legislation has been framed by the state, and such legislation should follow the announced national forest policy of sustained yield.

The increased interest in the timber of the Olympic Peninsula, due to the announced intention of several railroads to extend into virgin area from both north and south, is of vital importance to the communities of the peninsula and to the state as a whole. A main line common carrier into the Olympic Peninsula will assure a market for privately owned timber to the best advantage, promote the location of saw mills and various wood-working plants close to timber supplies, and in connection with the completion of the circuit of the Olympic highway will open to settlement and develop-

If the extension of these projected railroads unduly hastens the stripping of virgin timber, sacrificing it at low prices on a congested market, making impossible any provision for the saving of wood waste, then the future pulp wood timber supplies of the Olympics will be largely lost to the Olympic Peninsula communities and the state at large.—Lamb.

ment many fertile farming valleys.

BUT! The available virgin timber and the future possible supplies from regrowth, under the most favorable conditions, will operate to full capacity the saw mill plants now established in the Olympic Peninsula area for only a few years.

It is likewise a notorious fact that under present market conditions of low prices and low timber values, only the best of the log timber is being taken out of the woods, and so long as the present pulp plants can secure their raw material from the waste of the established saw mills small material and woods wastes will not be utilized. Therefore until additional pulp plants are established, making it necessary to look to woods refuse and forest material below log standards, it is inevitable that much otherwise excellent pulp material will be wasted under normal logging operations. If therefore the extension of these projected railroads unduly hastens the stripping of the virgin timber, sacrificing it at low prices on a congested market, making impossible any provision for the saving of the wood waste, then the future pulp wood timber supplies of the Olympics will be largely lost to the Olympic Peninsula communities and the state at large.

With the impossibility of withholding the private timber, and the fact that the Indian reservation timber is in the process of sale and disposal, everyone interested in the future of the Olympic communities and the up-building of a great pulp industry in Western Washington should stand squarely upon the broad principle that state and federal timber should only be sold as needed, when it can be fully utilized, and in such amounts that the sustained yield would maintain our plants indefinitely.

State Vigilance Urged

Beyond this, we should, as stockholders of the state and as citizens interested in its future, be ever vigilant to see that laws are enacted and administration is carried on to the end that the problem of cut-over lands is solved so that either the private owner can afford to own them for timber growing or the state can take them over on a nominal valuation and through protection, proper management, and where necessary through planting, assure that every acre of land not more suitable for other purposes would be devoted to timber growing.

Nature has been most kind to western Washington in its provision for making this a great lumber and pulp region. With four native species among the most valuable in the world, with a splendid natural reproduction and a rate of growth unexcelled in the United States, it only remains for us to use a little forethought, common sense, and the experience of other sections of the world to make the Olympic Peninsula the greatest lumber, pulp and paper center of the United States for all time.

The alternative is to slash and cut for present uncertain profits these millions of acres, leaving to posterity a heritage of worthless, denuded, unproductive lands. Abandoned plants despair! The pulp industry with its long time investments and its imperative need of sustained supplies of wood should be a big factor in causing this state to make a wise decision.

Coast Can Use the Trees to Toothpicks Idea

"There is no doubt that your people can do on the Pacific Coast what we can do here in Cloquet, keeping in mind only one thing, that the manufacturers must

get a new dollar for an old one and also a little profit."

Thus writes R. M. Weyerhaeuser, chairman of the board of the Northwest Paper Co., Cloquet, Minn., in answer to a query put by PACIFIC PULP & PAPER INDUSTRY, which asked in effect, "Do you believe that the Cloquet idea, with modifications, can be applied to the Pacific Coast?"

The "Cloquet idea" was described in detail in the March issue of PACIFIC PULP & PAPER INDUSTRY in an article headed "From Trees to Toothpicks." It told how a number of wood-using industries had been welded into a single management, how logging, railroading, lumber manufacture, wood specialties manufacture, pulp and paper manufacture had all been brought into a unified operation that is designed to function on a perpetual basis in the same Minnesota country that lumbermen and pulp men have been leaving behind because the margin of profit was too slim when conducting each operation on an independent basis.

On the Coast the idea in principle could be applied, according to Mr. Weyerhaeuser.

Certainly there must be some better method than the toleration of wholesale wastes in woods and in sawmill, where logging, lumbering, woodworking and pulp making are all working independently. Just how far away from the Pacific Coast is the complete integration of the wood-using industries?

Port Alberni Rumor Refloated

E. W. Bowness, advisor to the Alberta Utility Board, which controls water power resources in that province, has been making an inspection of the power resources of Stamp River falls on the west coast of Vancouver Island, and it is reported that interests seeking the establishment of a pulp and paper mill near Port Alberni contemplate application for the power rights there. Mr. Bowness is only one of several power experts who have been making an investigation of the Stamp River possibilities. Stamp River is believed to be the most important source of hydro power on the west coast and second only to Campbell River on the island.

Roy W. Kelly Resigns From Crown

Roy W. Kelly, industrial engineer with the Crown Willamette Paper Co., operating from the Portland office in charge of safety and employment at the Camas and West Linn mills, resigned from the company's employment March 15, to become associated with a bank in Portland.

Airplane Field in Olympics

The forestry service and other federal departments are keenly interested in the project of providing an airplane landing field at the Low Divide in the heart of the Olympic mountains. The field is wanted as a supplementary cog in the fire protection system of the service. Little clearing is needed.

Want Bridge Across Quillayute

Clallam county commissioners have been petitioned to put a bridge across the mouth of the Quillayute River where the stream gives up to the Pacific Ocean the waters gathered in the Western Olympics in Washington. For the past several years the Quillayute has been the scene of extensive pulpwood operations.

PULP

Is a Natural Part of the Development of the Western Olympics

By J. H. BLOEDEL

President, Bloedel Donovan Lumber Mills

PULP and paper have a definite and logical place in the natural development of the Olympic Peninsula. The only way to work out the solution of utilization of the Olympic timber is in cooperation with the pulp and paper industry. Pulp and paper is a definite part of the plans of our own company. We have spent considerable time and money in preliminary investigation and will most certainly go into it at an early date. We will be forced into it. Further, I am willing to predict that some 20 years from now the loggers and lumbermen of the Pacific Coast will be pulp and paper men. That is the trend by necessity.

We operate extensively. More than ten years ago we investigated the northern portion of the Olympic Peninsula. Some six years ago we began cutting there and today we supply a great percentage of the logs going to Puget Sound sawmills.

We have 1000 men in the woods today in the northwestern Olympics. There is an old rule of thumb measurement of 1000 feet of lumber per man per day in the woods. We are putting into salt water at Clallam Bay on the Straits of Juan de Fuca, the terminus of our logging road in the Olympics, more than 300,000,000 feet b. m. of logs every year. That is logging at a rate of one-million to one and one-half million feet daily. Again applying the rule of thumb which says two men in the lumber mills for every one in the woods, it is seen that on our woods operations in the Olympics are dependent some 2000 men in sawmills in Puget Sound. This method takes into consideration only the straight production of lumber.

Straight lumber production has never been more than a fairly unprofitable business. Like the meat packer who utilizes everything down to the squeal, the lumber industry is finding that it must produce something besides just lumber if it would profit. That this is happening is seen in the rapid development of such auxiliary timber-using industries as pulp and paper, veneer and plywood manufacture, woodworking, box shooks, sash and door fabrication. These are all rapidly growing industries which are helping to get more dollars out of the trees, and that, after all, is the nub of the question. That rule of thumb about two men in the sawmill for every man in the woods applies, as I said, only to straight

lumber production. As we get into the auxiliary industries I have named, the payrolls increase rapidly. The further the fabrication is carried out, the more men are required to do it, the better off is the community by reason of a larger payroll.

When our company first got into the lumber business some 30 years ago waste was waste and that was all there was to it. We had our burners to consume the refuse and these burners cost us good money to keep in repair and to operate. Last year the revenue our company alone received from what had formerly been waste amounted to some \$190,000. That is progress. We still maintain burners, but only to take up occasional slack. That is why I emphasize that in another score of years our loggers and lumbermen will all be pulp and paper men. There is no other way out. Complete utilization must come.

We have only to look at other sections of the country for specific examples, to have the advantage of actually seeing our future history laid out in parallel in the past. Take Minnesota and Wisconsin as specific examples. The

loggers first went through there for the white pine. As the lands became denuded the pulp and paper mills began to look to the hemlock and to find a place in utilizing this waste at which the logger of the earlier day had turned up his nose. History repeats, and the history of these Middle West states will repeat itself with respect to the timber country of the Pacific Coast.

Bloedel Donovan Lumber Mills are going into the Western Olympics. And they are going in now, principally as a matter of protection. If there is going to be some fighting we want to be in it. And with that entry into a timber country which is predominantly pulpwood, pulp and paper is going to become a definite part of the program. This is no new thought. Our company investigated the region long ago and laid its plans. Now it is acting.

Today the Bloedel Donovan interests own and operate 80 miles of logging railroad—main line and branches—extending in a general southerly direction from the salt water terminal at Clallam Bay. They hold some 60,000 acres of timber. The road is already within three or four miles of Forks, frontier town in the western country.

Twenty years from now the lumbermen of the Pacific Coast will be pulp and paper men. That is the trend by necessity. Straight lumber production has never been more than fairly unprofitable. Like the packing industry, the lumber industry is finding that it must use every thing down to the squeal. Pulp is a step in that direction, and a necessary step with the opening of the Olympics.—Bloedel.

With the announcement that the government "spruce road" would build south nine miles to Forks and perhaps beyond and with the announcement of the Northern Pacific-Union Pacific intention to combine and build 60 miles of road north from Grays Harbor to the Hoh River, we have put crews on the ground and will carry our rails past Forks, down the Bogachiel, across the Hoh and up the Hoh to Spruce, a total of 29 miles. This will bring the road to the door of federal timber in this rich region.

On the question whether the timber from the Western Olympics is to go out through Grays Harbor or out through the north, I have this to say:

"Grays Harbor lays claim to an existing industry dependent upon timber and gives a long list of reasons in support of their request to the U. S. Forest Service for allocation of some 18 billion feet of reserve timber. The northern limit of this requested allocation is much too far north to tickle the palate of anyone on Puget Sound or the northern part of the peninsula. As president of a company that annually supplies more than 300,000,000 feet of logs to Puget Sound mills I say that every reason given by the Grays Harbor group for the allocation of this timber applies to Puget Sound wood-using industries equally well and times twenty. There could be no objection to the allocation and drainage of the peninsula timber from a point midway between Grays Harbor and the Straits of Juan de Fuca, but the former is over-reaching in demanding all of the peninsula."

Another Mill Proposed For Everett

In an authorized statement to PACIFIC PULP & PAPER INDUSTRY, E. M. Mills, vice-president of the Crown Zellerbach Corporation, emphasizes that the corporation is not interested in the erection of a pulp or paper mill at Everett, Washington, at this time.

Mr. Mills states that while the corporation is not interested, a syndicate of which he is a member may build a sulphite or a kraft pulp mill at Everett soon. This syndicate would probably include Everett interests, mainly drawn from the logging and lumbering field. It is expected that a definite decision will be made, Mr. Mills declared, within 30 days.

The report that the Crown Zellerbach Corporation would build a new mill at Everett gained wide circulation late in March when K. O. Fosse, president of the International Wood & Sulphite Co., an organization closely allied with the Crown Zellerbach interests in furnishing wood and chips, secured an option on a site adjoining the Canyon Lumber Co. at Everett and contracted with the lumber company for its waste on a long-time basis. The site comprises 39 acres.

A preliminary request made through Mr. Fosse asks for a water supply of 10 million to 20 million gallons of water daily. This would be supplied from the proposed new Everett water system which comes up for a bond vote on May 4.

The proposed mill may cost approximately \$5,000,000. Should the Canyon Lumber Co. become a part of the syndicate in the final plans it is probable that the company's logging road would be a part of the program. This reaches into a timber area predominantly pulpwood and makes accessible some federal timber.

Once the logs are in the salt water the towage costs to Puget Sound mills are insignificant.

The fate of the private timber on the Western Olympics seems to be rather hopeless. Both Mr. J. J. Donovan, vice president, and myself are in accord with the statement made by Alex Polson with respect to opening up the peninsula by the 60-mile rail extension from Grays Harbor.

Mr. Polson has stated it aptly when he said, "If the development of the Western Olympics could be slowed down until the pulp industry is built up to form an adequate market for this wealth of pulp material, the general business of the state and the Pacific Coast would benefit hugely."

Let me repeat: "The way to work out the problem of the Western Olympics is to cooperate with the pulp and paper industry."

Radio In the Paper Mill

Radio will help to shorten the days and nights for those who toil on the paper machines in the Fort Howard mill at Green Bay, Wis., through an arrangement perfected by A. E. Cofrin, president of the company.

Mr. Cofrin, who once toiled on the machine himself, knows what the long nights and days mean. He believes that it does not reduce the efficiency of any man to listen to good music, and he knows that the air is full of music waiting only for radio.

An ordinary radio receiving set has been installed in the commissary of the mill, and is connected with amplifiers and loud speakers in six departments of the mill. One is in the general offices, one in the boiler room, one in the paper machine room, one in the napkin department, one in the finishing department and one so that on summer days it may be faced to an open window and send programs out over the grounds.

All employees of the mill bring their lunches and remain all day at the plant. The entire three hundred employees will enjoy the radio programs at the noon hour, or other rest periods, but those who spend the long night in the boiler room will have music at all hours. Likewise those on the paper machines will have their time shortened by the radio programs.

It is possible also to have greater volume in one department than in another. A small power unit will also be installed so that announcements to all departments may be made by the president without his leaving the office or assembling the employees. However, the principal use to be made of the machine is the entertainment of the employees.

Cold Weather Causes Water Shortage

Three newsprint machines of the Pacific Mills, Ltd. (Crown Willamette), at Ocean Falls, B. C., were still shut down at the beginning of April as a result of an unprecedented shortage of water and will probably remain out of action for another month. The continued cold weather has resulted in delaying the spring thaw and while the reservoir water has risen ten feet from its low point it must rise considerably more before sufficient head is available to drive the turbines. The company is operating its kraft machine, but all other mechanical equipment is inactive and has been so since January 15. Meanwhile the company's employees are concentrating on various minor construction projects, such as remodeling the groundwood mill which is being made available for increased capacity.

New Sulphite Mill

Will be Constructed at Everett, Wash., by the Newly Organized

Puget Sound Pulp & Timber Co.

A BUZZ of excitement which has keyed up the city of Everett, Wash., in the past several months and which has forecast something important in the way of pulp and paper mill development for that city came into being in March with the announcement of the creation of a new \$12,000,000 corporation which will begin early construction on a new and thoroughly modern pulp mill to have annual capacity of 50,000 tons of highest grade bleached sulphite pulp and to cost approximately \$3,500,000.

The new corporation is known as the Puget Sound Pulp & Timber Co. It represents the crystallization of thought developing for several years. An important and interesting feature of the new company is that it is strictly a Pacific Coast development, the principals in it being men who have been actively identified with the logging, lumbering and pulp industries on the Pacific Coast for the past 25 years or more.

Merge Mills and Railroads

Specifically the new company has brought into one organization the following properties:

The San Juan Pulp Manufacturing Co. at Bellingham, Wash., an unbleached sulphite pulp mill built in 1926 and doubled in 1928 to a daily capacity of 90 tons. The Fidalgo Pulp Manufacturing Co. of Anacortes, a 60-ton unbleached sulphite mill slightly older than the Bellingham mill. The Skagit Valley Lumber Co. at Clear Lake, commonly known as the "Clear Lake Mill." The Rucker Brothers' logging and lumbering operations at Lake Stevens and the "Rucker railroad," or Hartford & Eastern Railway Co., a common carrier operating about 42 miles of rail in Snohomish County from a point near Lake Stevens to Monte Cristo, a famous scenic point and the site of the Big Four Inn, which goes with the railroad property. The Puget Sound & Cascade Railway Co., a common carrier, operating about 50 miles of rail in Skagit county in a generally Easterly direction from Clear Lake.

The two railroads tap some enormous stands of timber which run a strong percentage of the preferred pulping species, Sitka spruce, Western hemlock and balsam.

March Marks Formal Completion

Formal completion of the new giant company came about when the stockholders of the San Juan and the Fidalgo pulp companies voted late in March to enter the merger.

Officers and directors of the new corporation include substantially the names of those who had appeared in

the official line-up of the two pulp companies. Officers are:

Chairman of the Board	Homer W. Bunker
President	Ossian Anderson
First Vice-President	P. F. Knight
Vice-President	William Morrison
Treasurer	Neil Sexton
Secretary	H. R. Lawton

Mr. Bunker is president of the Coos Bay Lumber Co., at Marshfield, Ore., and is one of the best known

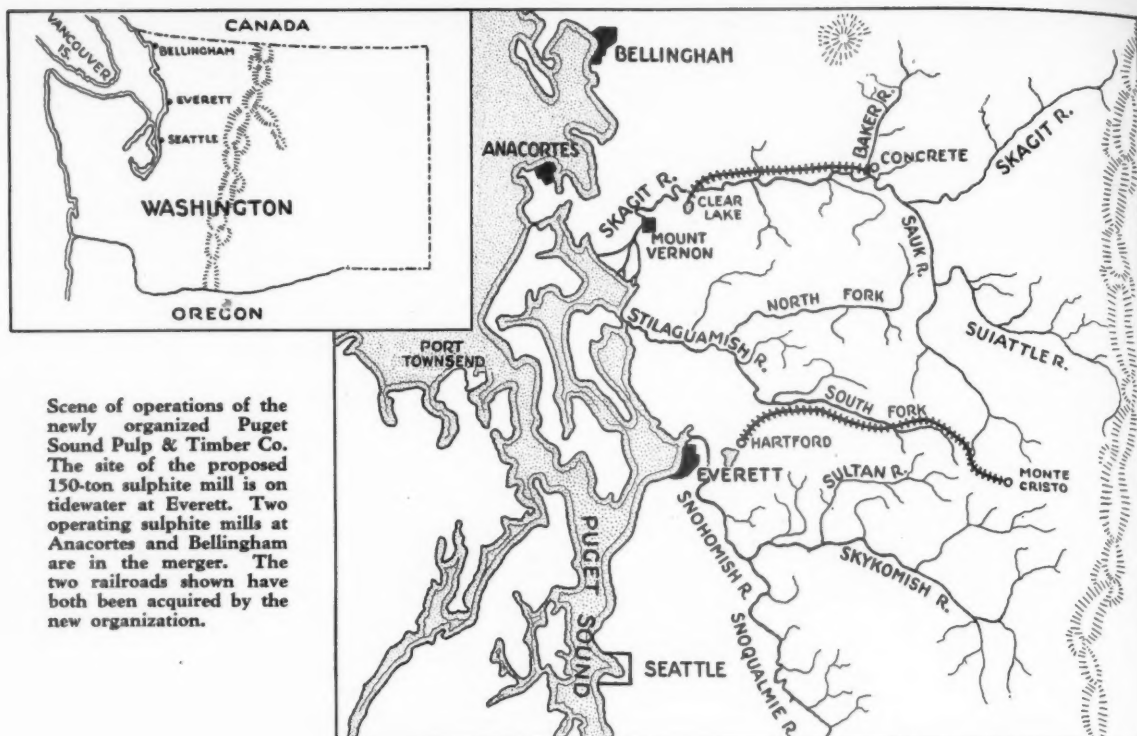


Hamilton Photo, Seattle

OSSIAN ANDERSON

men in the Pacific Coast lumbering industry. Mr. Anderson was president of both the San Juan and the Fidalgo pulp companies before the merger. In addition to his pulp activities, he has also been interested in lumbering and other enterprises on the Coast for many years.

Mr. Morrison is vice-president of the Morrison Mill Co., operating big lumber and wooden box factories at Anacortes, Bellingham and Blaine, Wash. Mr. Knight is vice-president and general manager of the Mutual



Scene of operations of the newly organized Puget Sound Pulp & Timber Co. The site of the proposed 150-ton sulphite mill is on tidewater at Everett. Two operating sulphite mills at Anacortes and Bellingham are in the merger. The two railroads shown have both been acquired by the new organization.

Lumber Co., at Bucoda, Wash. Mr. Lawton is a vice-president of Pierce, Fair & Co., financial house. Mr. Sexton has been with the financial company of Price & Waterhouse for many years.

The board of directors, in addition to these officers named above, includes the following men:

U. M. Dickey.....	Pres. of the Consolidated Dairy Products Co. at Seattle.
R. H. Miller.....	Director of the National Bank of Commerce of Seattle, and former President Mutual Paper Corp., large distributing paper house of Seattle.
W. Neal Winter.....	Pres. of the West Coast Telephone Co. of Everett.
H. M. Robbins.....	Pres. of the Clark-Nickerson Lumber Co. of Everett.
O. M. Green.....	Pres. of the Olympia National Bank of Olympia.
Peter G. Schmidt.....	Pres. of the Schmidt Estate, Inc., of Olympia, and Sec'y of the Washington Hotels Co.

The properties brought into the Puget Sound Pulp & Timber Co. are designed to effect an efficient industrial unit basing its raw material requirements upon the Pacific Coast timber resources.

Hardy Ferguson, of New York, one of the best known pulp and paper mill engineers of today, has been engaged to design and construct the new pulp mill unit, which will be the first of possible further additions. President Anderson states that the mill will embody all of the latest engineering practices to provide a mill that will be able to produce the highest grade of bleached sulphite on the latest and most efficient basis.

Mr. Ferguson is to make a trip to Sweden shortly, where he will inspect the pulp mills of that country and survey the latest methods adopted in that section of the world.

The pulp mill itself will be built on what is known as the old shipyard site on the Everett waterfront adjacent to the Clarke-Nickerson Lumber Company's mill. A

sawmill will be built into the pulp mill to function as a cut-up plant.

The mill will have its own power plant.

Mr. Anderson stresses the point that the new pulp mill will make its pulp from forest wood only. The object of putting in the sawmill unit will be to cut up the first grade logs and take out of them the clear lumber so that maximum revenues and utilization can be had from each log passing through the complete unit.

Logging will be conducted so as to anticipate the wants of the sawmills and pulp mill within the organization. Much of the timber that can be reached by the company's two logging railroads runs predominantly to pulping species and the aim of the company will be to take everything out of the woods as they go and thus eliminate to a large degree the logging wastes encountered in the ordinary logging practice of today on the Pacific Coast.

The new \$12,000,000 corporation has already signed an agreement with the city of Everett to use from 7,500,000 to 15,000,000 gallons of water daily in the new pulp mill. The engineering firm of Barr and Cunningham of Portland, who have handled a number of other major industrial water projects in the Pacific Northwest, were engaged some time ago to make a study of the industrial water supply for Everett. They have recommended construction of 50,000,000-gallon supply line tapping the Sultan river. The Everett city council put thru an emergency measure, and a \$2,000,000 bond election authorizing the construction of the water line is to be submitted to the voters next month.

Active management of the mill will be in the hands of President Ossian Anderson. Assisting him will be P. F. Knight, vice-president, who will take an active part in guiding the affairs of the lumber division. F. S. Scritsmeier, timber engineer, will have charge of the logging end.

The company is to establish offices at Everett shortly, from which point all operations will be directed.

Tentative capital structure of the new Puget Sound Pulp & Timber Company and the terms under which the new company acquired the Fidalgo and San Juan Pulp Manufacturing companies, the Clear Lake Lumber Company and the Rucker timber interests will comprise 95,000 shares of preferred stock of \$100 par and 95,000 shares of no-par common. One share of common will be given with each share of preferred, stockholders disclosed, and with \$4,500,000 of the preferred and 45,000 shares of the no-par common exchanged for the acquired companies.

According to Secretary Lawton, the financing may be accomplished privately without a public offering of stock or bonds.

The city of Everett is already the home of one pulp and paper mill, the Everett Pulp & Paper Co., established some forty years ago. Everett is also a city of great lumber activity. It has some fifteen lumber mills with a total 8-hour daily capacity of about 2¾ million feet.

A preliminary discussion of Everett and some of the rumors that were the forerunners of the Puget Sound Pulp & Timber Co. was published in the January, 1929, number of PP&PI.

President Anderson left for New York on April 8 for consultation with Engineer Hardy Ferguson.

Campbell River Decision This Month

Before the end of the present month the winner of the fight for Campbell River waterpower rights will be known and one of the most controversial issues concerning pulp and paper development in British Columbia settled.

Hon. F. P. Burden, minister of lands, has announced that the newly constituted provincial water board, with far-reaching authority in such matters, will determine before May 1 which of the several applicants will be authorized to utilize the hydro rights at Campbell River. All applicants will be treated on an equal basis, according to Mr. Burden. The chief contenders for the rights are the Crown Willamette Paper Co., the B. C. Power Corp., and the Campbell River Co.

During the recent session of the provincial legislature the Campbell River waterpower question caused more contentious debate than any other single issue, the opposition declaring that the government had broken faith with Crown Willamette by declining to honor the previous administration's agreement with the pulp and paper company.

The present government claims that Hon. T. D. Pattullo, former minister of lands, had no authority to make the agreement which he did with the company, providing for an extension of the company's exclusive rights to the Campbell River water.

Authorized to Spend \$335,000

Meanwhile the government is preparing for the disposal of the rights to someone and has been authorized to spend \$335,000 for standing timber surrounding Buttes Lake. This timber is to be preserved for park purposes, the assumption being that large stretches of forest will probably be ruined in that vicinity as a result of the flooding of various lakes by whatever company is given the privilege of going ahead with a power project at Campbell River.

The whole status of the Campbell River power was explained by Hon. R. L. Maitland, who said that the

government's policy was that no great power resources should be disposed of without the fullest possible notice and publicity, so that all interested in securing it should have an opportunity of advancing their proposals. He recalled that in 1909 Michael King of Vancouver, and associates, known as the Campbell River Co., had applied for a water lease on Campbell River and had spent \$90,000 in development there, including \$33,000 in fees to the government. On the other hand, said Mr. Maitland, the Crown Willamette company, under a private agreement with Mr. Pattullo, had paid nothing to the people of the province while tying up Campbell River power.

Campbell Rights Cancelled, 1916

In 1916, said Mr. Maitland, the rights of the Campbell River company were cancelled on the ground that it had not proceeded with development. The company, however, having expended \$90,000, was given the understanding that it would receive a first opportunity to secure rights again. Instead, Mr. Pattullo had negotiated a private deal with Crown Willamette without the authority of the cabinet or the legislature, without giving the former holders any opportunity to bid again. The agreement between the company and Mr. Pattullo was dated March 3, 1927, and gave it until September 3 to apply for water rights. The company paid nothing to the government, but deposited a bond of \$25,000. On August 27 the company asked for an extension of time and Mr. Pattullo granted it four months' extension. Another extension was granted in February, 1928, and in August, although the government had been defeated in the election and was merely waiting for the new administration formally to take charge, Mr. Pattullo gave a further extension for a full year.

A. M. Manson, a member of the former government with Mr. Pattullo, criticized the cancellation of the agreement with the Crown Willamette company, saying that it had spent \$80,000 on development work and that the delay of construction was justified by the uncertain condition of the paper market.

New Westminster Pulp Mill Prospects Bright

C. D. Altick, of Seattle, Wash., has returned East to complete plans for the establishment of a new pulp and paper mill near New Westminster, B. C. It is understood that his efforts to obtain adequate financial backing for the enterprise in New York have been successful and that there will be no further obstacles in the way of an early start of construction, so far as capital is concerned.

Possibility of an unfavorable tariff against Canadian pulp in the United States was referred to in correspondence that has passed between Mayor A. Wells Gray of New Westminster and Mr. Altick, and Mayor Gray suggested that Mr. Altick confer with government officials in Ottawa regarding that situation.

Meanwhile Mayor Gray has been advised that plans are afoot in Eastern Canada to increase the export duty on pulpwood from Canada by the Canadian government as a means of retaliation should the United States raise the tariff on Canadian paper.

Location of the New Westminster plant, which it is believed, will be a 100-ton bleached sulphite mill, is understood to have been tentatively fixed at Queensborough, a suburb commanding waterfrontage on the Fraser River. The New Westminster district comprises the greatest single lumber manufacturing area in British Columbia.

Sipes Now Superintendent at Shaffer Mill

R. A. Sipes took over the duties of superintendent of the sulphite pulp mill of the Shaffer Box Co. on April 5, succeeding E. A. Shirley, who resigned recently. Mr. Sipes is a well known figure on the Coast. Until re-



R. A. SIPES

Sulphite Pulp Mill
Superintendent

SHAFFER BOX CO.,
TACOMA

cently he was sulphite superintendent at the Hawley Pulp & Paper Co., Oregon City, Ore. The Shaffer Box Co. is the latest sulphite mill to get into production on the Coast. It has a daily capacity of 50 tons of unbleached and began production last November.

To Organize Coast Technical Section in Summer

Prospects for the early perfection of a Pacific Coast section of TAPPI appear to be excellent. Dr. H. K. Benson, who has acted as chairman in developing the Pacific Coast section has received the following letter from Secretary R. G. Macdonald:

March 4, 1929.

Dr. H. K. Benson,
University of Washington,
Seattle, Washington.

Dear Doctor Benson:

You have undoubtedly seen the comments made by the President and Secretary of TAPPI, as published in the Convention issue of the Paper Trade Journal.

At the meeting of the Executive Committee held on February 18th in New York the organization of a section of the Technical Association on the Pacific Coast was considered and acted upon. With but few exceptions the recommendations proposed by your Organization Committee were adopted. I will outline the various points that are of importance. The Committee approved the following plan:

1. That a Pacific Coast Section of the Technical Association of the Pulp and Paper Industry be organized.
2. That the Secretary collect such data as may be necessary preliminary to the organization of such a section.
3. All members of the Pacific Coast Section pay dues to TAPPI as members, associate members, and juniors, according to the TAPPI by-laws.
4. The Pacific Coast Section have its own officers, who must recommend Pacific Coast Section members before sending applications to TAPPI Secretary for approval of the National Executive Committee. The Pacific Coast Section should be represented on the TAPPI Executive Committee.
5. The Secretary of TAPPI be authorized to visit the Pacific Coast to establish the Section.
6. When the Pacific Coast Section is well organized and sufficiently large to assure the success of such an event, the Executive Committee give consideration to an invitation to hold a fall meeting in the Pacific Coast Center.
7. The Technical Association return to the Pacific Coast Section each year ten per cent of the total dues received from the members of the Section and then an accounting be received for the expenditure of such funds.
8. The facilities of the National Secretary's Office be made available to the Section.

9. Membership qualifications for the Pacific Coast Section be in accordance with TAPPI Articles of Organization and that due consideration be given to the special qualifications of candidates for membership who may not have been in the industry long enough to qualify according to the Articles of Organization for associate or active membership.

You will note in the accompanying booklet that a suggested outline of by-laws is given, and that in Article X., Section 1, it is stated that the formation of such a section may be authorized by the Executive Committee upon the written petition of five or more members. You have qualified in this regard and I may say my general questionnaire sent out to all members brought back a unanimously favorable response from the thirty or more who replied.

B. T. McBain is now in New York and will discuss with me in a few days the general subject of the Pacific Coast Section. You will note that the Secretary has been authorized to visit the Coast to assist in the organization of the Section. The work in New York is such as to make it difficult for him to leave town for a long trip before the middle of May. Possibly the best plan would be for you to proceed with a temporary organization and arrange to hold an official organization meeting during the summer.

I will send a letter to all the Pacific Coast members notifying them of the action of the Executive Committee and will provide a blank upon which they may apply for membership in the Pacific Coast Section.

Inasmuch as we are located at a considerable distance from each other, you will, of course, be justified in using a considerable amount of freedom in establishing and operating the Section.

It is, indeed, a pleasure, to have an organization such as the Pacific Coast Section will be, a part of the Technical Association. I am sure that within a year or two you will be able to act as hosts to a large delegation from the East. You have a wonderful opportunity to build up a strong organization inasmuch as I am quite convinced that all of our Coast members are heartily in sympathy with the plan.

I shall write you further on this subject in a few days.

Cordially yours,
R. G. MACDONALD,
Secretary.

Building Sawmill in Connection with Pulp Mill

Work on the new 75-ton sulphite mill of the Sitka Spruce Pulp & Paper Co., Empire, Ore., is being pushed rapidly, and it is expected that production will be started within the next 90 days. One of the two Willamette digesters was completed and installed last month.

Due to the excellence of shop fabrication and care with which it was assembled, only 25 minutes were required by the boiler inspector to pass on the unit. Passing a digester in so short a time establishes a record for this type of equipment marks a record, as several weeks are sometimes required to pass on digesters, it was said.

Construction on the second digester is proceeding rapidly, and it was expected that it would be completed and installed some time this month. The 16x52-foot digesters, weighing 80 tons each, are being built by the Willamette Iron & Steel Works of Portland.

J. B. Wilt, who is supervising mill construction, is expected to return shortly from the East, where he was said to be buying mill equipment. During his absence, C. W. Parker, a local engineer, is overseeing construction.

C. McC. Johnson, a prominent Oregon lumberman, and associates are backing the project.

A spruce sawmill is now being erected in connection with the pulp mill. It will have a daily capacity of 125,000 board feet. Machinery is being taken out of the Lyons-Johnson mill, said to be owned in part by the Dollar shipping interests and idle for some years, to be installed in the new spruce mill. This unit will function principally as a cut up unit for the pulp mill.

Chromium Plating

What It Is, and Its Application to the Pulp and Paper Industry

Some Suggestion for Attack on Those Arch Enemies "WEAR" and "CORROSION"

By L. A. DAVIES
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BECAUSE organic and practically all mineral acids will not attack a chromium plated surface, and because of its excellent wear resisting qualities, electro deposited chromium is expected to solve many corrosion and wear resistance problems of the pulp and paper manufacturer. Service in several prominent mills shows that a very substantial yearly saving can be effected by applying chromium to such parts as flat screen plates, evaporator tubes, pump shafts, valve parts, drying rolls, etc. In some of these applications it appears that it will be possible to discard high priced alloys, and to fabricate parts from cheaper and more easily worked metals, yet still retain the necessary non-corroding and wear-resisting qualities that these special alloys possess.

Chromium occurs in combination with iron, in the mineral chromite, FeCrO_4 , in many parts of the world. The following countries produce the major part of the better grade ores: Cuba, India, Japan, New Caledonia, Rhodesia, Russia and Union South Africa. In order to make the chromium content of ores available for industry, it is converted into chromates and ferrochrome. The chromates furnish the materials for chrome tanning, the chrome pigments for paints and dyes, and chrome plating, while the ferrochrome is used in producing the larger number of iron chromium alloys now on the market.

Exceptionally Hard Finish

The present widespread use of chromium plate is due to the development of a process which would give uniform results, and can be credited to the patented inventions of United Chromium, Inc., and its predecessor companies.

Chromium as an electroplated finish has unusual properties. It can be produced with a high polish which is not affected by ammonia, sulfur, hydrogen sulfide, dilute alkalis, salt water atmosphere, or organic acids. Chromium plate is rated at nine, compared to the diamond at 10, on Moh's hardness scale. Most of the ordinary metals can be plated with chromium, but cast iron is apt to be so variable in composition and to have sand pockets or slag inclusions that it is not a desirable base for chromium plate. If the surface is free from slag and graphite, good, uniform deposits of chromium can be produced.

The hardness of chromium has found commercial application as a facing for electrotypes, printing plates, mandrels, plug gauges, dies, porcelain dies, rubber moulds, golf clubs, snubber reels, and textile equipment. The use of plate .0002" to .0005" in thickness

is equal to superior case hardening. Engraved steel plates are now faced with chromium instead of being case hardened. One plate ran for over 150,000 impressions, while the usual run is 50,000. Nickel or steel faced copper plates have been good for about 3,000 impressions, while chromium faced copper plates are good for at least 10,000 to 25,000.

Wear and Corrosion

Chromium has nearly the hardness of diamond and it has wonderful properties for resisting the action of corrosive agents. Scientists experimented with chromium for many decades before they developed a commercially successful method of chromium plating. But persistence was rewarded and today most of the ordinary metals can be plated readily. In pulp and paper manufacturing where corrosives, heat and other agents of wear are important factors in the overhead chromium is finding many practical uses.

Two things of perpetual interest to the operating manager of a pulp and paper mill are, "How can I reduce the replacement frequency of certain types of equipment?" and "How can I avoid expensive shutdowns occasioned by equipment failure during operating time?"

Both are items of constant expense. One remedy which is applicable to both problems is the selection of materials resistant to the two chief contributors to these operating worries, namely, wear and corrosion. In this article Mr. Davies points out how chromium has helped to solve these two problems. He suggests as some possible applications in the pulp and paper industry the chromium plating of evaporator tubes, pump shafts, valve parts, flat bronze screen plates, four-drainer wires, calendar rolls, digester fittings, beater parts, jordan parts, chipper knives and many others.

One of the most important and interesting applications of chromium on the Pacific Coast at present is its use for protecting the interior of oil cracking and distillation apparatus from attack of sulfur compounds. Such equipment, of course, is operated at high pressure (300-500-lb.) and at a temperature of about 1,000° F. where the corrosive properties of oil vapors are considerably multiplied. Reaction chambers coated with chromium have been in service at the California refineries

of two very large oil companies for many months. Reaction chambers not coated with chromium have been found to corrode at the rate of about one-sixteenth inch of metal thickness per month.

Successful experience on oil refinery parts should recommend the use of chromium plate in the pulp and paper field, where corrosion appears largely to be caused by sulfur compounds. Very satisfactory results were obtained from one of the first applications of chromium to evaporator tubes. A western paper company gave the following report on the use of chromium plated tubes in such equipment:

"On All Replacements"

"The 20 chromium plated tubes which you furnished us the early part of last year have been in service in our evaporators for about one year. It has been necessary to renew one of these tubes. The other 19 seem to be in as good shape as when we put them in. The one tube which had to be replaced developed just one small leak about $\frac{1}{8}$ " diameter, the balance of the plating showing no corrosion. It looks as if the plating might have been put over loose scale, or possibly there was a defect in the original tube. Ordinarily untreated charcoal iron tubes last about six to nine months in the third effect of our evaporators. We have not used chromium plated tubes long enough to tell what their average life will be, but the fact that of the first 20 tubes installed, 19 have shown practically no corrosion to date, encourages us sufficiently to try them out on all replacements hereafter.

"Our evaporators are used in concentrating 'black liquors' drained from sulphate pulp. The liquors used in cooking this pulp are composed of about 50% NaOH, 25% Na_2S , and the balance Na_2CO_3 and Na_2SO_4 . This liquor combines with the organic matter in the wood, forming rather complex decomposition products in the black liquors. It is the gases from these black liquors which are corrosive. Probably the most active agents are the organic combinations of sulfur, but you will notice that the tubes are in contact with caustic liquors as well. We find, however, that the liquor itself does not affect the tubes appreciably. The liquor is on the inside of our tubes, whereas the corrosion is altogether from the outside where the vapors arising from one effect are used in boiling the liquors in the succeeding effect."

Practical on Small Tubes

The tubes which they tested were charcoal iron plated on the outside and were difficult to plate because of the slag inclusions. Seamless steel tubing is a much better base for plating and has been used on recent installations by several companies. Tubing in sizes as small as 1" I. D. can be plated, both inside and outside, though the inside plating is somewhat more expensive.

One of the evaporator companies has concluded tests showing that chromium plated evaporator tubes are satisfactory in contact with sulphite, as well as sulphate, liquor.

The resistance of chromium to corrosion, combined with its extreme hardness, makes the use of chromium plate advantageous on such parts as pump shafts, which ordinarily fail very rapidly when used in sulphite or sulphate solutions. Care must be exercised in the selection of base metal on which to apply the plate. With a proper selection of a cheap metal base material, it is possible to prolong the life of shafts from three to five times that ordinarily obtained from the common brass shaft. The small added expense of chromium plating

is thus amply justified by achieving a minimum of shut-downs for replacements.

The use of chromium on valve parts is also valuable. With valves having removable discs and seats, it is recommended to plate both wearing surfaces. Here the life of the parts is multiplied about five times, and indications are that it will be possible to dispense with the expensive phosphor bronze material used formerly.

Flat bronze screen plates may also be plated with chromium for preventing wear. The cause for replacement of most screen plates, however, seems to be a spreading of the slots, rather than their wearing out. The most practical means of lengthening the life of these parts at present seems to be to make the plates out of a material considerably cheaper than the bronze now being used. Such material would also be much stiffer, and the slots would, therefore, resist any spreading action. Chromium is used to prevent corrosion of the material, and also to increase its wearing qualities.

On Stereotype and Electrotpe

Another excellent application of interest to the paper industry is the use of chromium on stereotype and electrotpe plates. In this connection it is important to remember that on Moh's scale of hardness, chromium plate has an index of 9. On the same scale, the diamond is 10, boron is 9.5, corundum is 9, topaz is 8, agate and quartz are 7, and manganese is 5. The reason for the long life of chromium plated printing plates is thus readily apparent. On stereotype plates used in one mill, the life of plates in use was multiplied by as much as 20 times over the plain stereotype material. In addition to making possible this longer life, the chromium plate also produced clearer and sharper impressions throughout the run. A double saving was effected here; first, by reducing the number of shut-downs for replacement; and, second, by cutting the cost of the plates themselves.

Numerous Applications Possible

Numerous other applications have been made in the pulp and paper industry, including calendar rolls, digester fittings, Fourdrinier wires, beater parts, Jordan parts, chipper knives, breast rolls, press rolls and a great number of paper machine parts. The uses mentioned above will no doubt suggest to the pulp and paper engineer many other applications where the inherent properties of chromium are of vital importance.

In considering the use of chromium, however, it must be remembered that the process by which it is applied requires careful engineering supervision, and that different purposes for which it is used require different methods of application. Several years of research have been spent in perfecting the process, and work is constantly being carried on to improve present procedure and to determine the types of deposit best suited to each proposed use. United Chromium, Inc., of New York, controls patents on the chromium plating process, and its research departments in Detroit and New York are being devoted to developments of the process and its applications. Pacific Coast sales and service offices have been opened in San Francisco in order to be in close contact with the paper industry. Arrangements have been made whereby manufacturers may apply chromium in their own plants under the United Chromium license agreement, all licensees being given full benefit of technical supervision and advice. Steps are also being taken to license job plating shops at strategic points to handle work for manufacturers whose volume does not justify the installation of their own plants.



"What Kind of a Window Display Does My Carton Make?" Manufacturers See for Themselves in This Novel Fibreboard Products Inc., Exhibit

Putting the Windows Inside

An unique method of "putting across" new ideas for containers is being used by Fibreboard Products Inc. In their San Francisco offices in the Russ building they have erected a set of lobby show windows in which are attractively arranged a full display of the various types of cartons manufactured in the plants of the company.

The display windows are brilliantly illuminated by drop lights and visitors are inclined to blink their eyes to make certain that they are not standing on the sidewalk looking at an exterior display.

This display emphasizes the fact that many manufacturers are neglecting the high advertising value that their shipping cases can be made to possess—some of the cases shown are in fact miniature posters.

The display affords the manufacturer an opportunity to check up on the appearance of his own product alongside of competing brands and to determine whether or not his own containers are as efficient and modern as they might be.

In the three offices devoted to the display there are seven display cases. The first shows merchandise manufactured for the dairy industry and consists of butter cartons, egg cartons, ice cream and food pails, the new type white, both inside and out, Purity Jar, which are being used extensively for ice cream containers; also fillers for egg cases.

The second case shows various types of corrugated Super-test shipping cases and other products manufactured from corrugated paper such as pear pads, apple pads, etc.

The third window shows the various commodity items such as suit boxes, laundry boxes, florist boxes, and candy boxes together with cracker caddies, display boxes and numerous other die-cut materials and other hand made products.

The fourth window is a special one for particular display. At present this space shows cases carrying the various dried fruits. It shows the cases used where the raisins are packed in cartons, also where the raisins or prunes are packed in bags and the new reinforced bulk shipping case for raisins and prunes.

The fifth window shows products manufactured in the can and tube department and covers the complete line of mailing tubes, plain cans with paper tops and bottoms, also the various types of tin tops. These are shown in quite a variety of colors and different wrappers.

The sixth window shows solid fibre cases and has for its background probably the largest solid fibre case manufactured.

The seventh and last window is a very attractive and colorful display of cartons and covers practically every kind of dried fruit. There are numerous other cartons showing salt, tea, coffee, soap, noodles, practically every kind of merchandise that is shipped in this type of container.

Longview Mill Making Cargo

Eight ships loaded consignments of paper and fibre board for east coast, California and Australian ports during the past month at Longview, all the shipments being made by the Longview Fibre Co. The east coast shipments average more than 500 tons each, and went as follows: March 11, Texan; March 18, Nevadan; March 26, Iowan, and April 2, Nebraskan. All are American-Hawaiian steamers.

The California shipments were all smaller, and went via the Edna Christensen, March 21, the Munami, March 21, and the Silverado, March 29.

On March 15, the steamer Bullaren loaded about 100 tons for Australia. On March 28, the steamer Portland discharged 500 tons of chemicals from Germany for the plant.

Fishing Not So Good

A short lease of life was granted the big salmon that infest the waters below the Willamette falls when fisherman reported that high water and cold weather conditions were making "fishing not so good" early this month.

Employees of the paper mill at Oregon City look forward, however, to getting the big ones later on in the month.

Bellingham Tissue Mill to Enlarge

Pacific Coast Paper Mills of Bellingham, Wash., has approved a bond issue of \$50,000 and will expend approximately that sum in the installation of new equipment to include a new beater, a jordan, new screens, and additional dryers to increase the speed of the paper machine. Additional towel folding equipment and a new toilet winder will be installed also. The expansion will not require the building of any additional mill buildings, but will augment the mill's present capacity of about 18 tons daily.

According to word from Elmer Herb, sales manager of the firm, the program will be completed within 90 days.

The Bellingham mill came into the control of the Herb interests in 1926 and since that time has been enjoying a steadily increasing business, finding a constantly widening market for its toilet papers, towels and similar commodities. J. J. Herb, president of the company, has been associated with the paper business for many years, both here on the Coast and in the Middle West. He is also the president of the Westminster Paper Mills, Ltd., a companion mill making similar products for Canadian trade just across the international boundary at New Westminster, B. C.

The Bellingham mill has been working under pressure for months and the new equipment will enable the concern to keep pace with its orders. The valuation of grounds, buildings and machinery is placed at \$368,000; sales last year totaled \$350,000, and forty distributors handle the factory's output in Washington, Oregon, California, Idaho, Montana and Utah.

"By the expansion now contemplated," says President J. J. Herb, "we have every confidence that we can double our profits for 1929 over our results in 1928. We have already proved these changes in our experience at the New Westminster plant last year, where we changed a profit of \$22,000 in 1927 to a profit of \$60,000 in 1928, with an increase of only one-fourth in sales."

Driving Piles for Willapa Mill

The work of driving the foundation piling for the Willapa Pulp & Paper Mills, to be built in Washington between Raymond and South Bend, will be completed by the middle of this month, E. A. Barry, company secretary, stated when asked for a statement regarding construction of the 75-ton sulphate pulp mill.

"All details of the plans and specifications have been completed, and bids will be asked for some time during the present month," he said. "Practically all equipment detail has been settled, and we will push construction and installation rapidly as soon as bids are accepted. We hope to swing into production in early fall."

K. A. Forrest, manager of the pulp and paper division of the Swenson Evaporator Co., is giving considerable time to the Willapa project. Mr. Forrest was on business for the Willapa company in San Francisco early this month.

Augment Water Line at Grays Harbor

Construction was started last month on an auxiliary all-steel pipe line designed to furnish the Grays Harbor Pulp & Paper Co., at Hoquiam, Wash., with an additional 13,000,000 gallons of water every 24 hours during the dry season. The line, 4700 feet in length, taps the Wiskah River about eight miles above the mill and has its outlet in the East Hoquiam River. Water from the latter is supplied to the mill from a dam just below the point where the new pipe will discharge. A pump-

ing plant is being built at the point of divergence from the Wiskah River, and the layout is so designed that a dam can be added at that point if found necessary. The contract is to be completed by June 1. Parker & Schram, Portland, have the contract. Engineering work is being done by Barr & Cunningham, also of Portland.

No Real News on Umpqua

Although indicating that satisfactory progress is being made on plans for the proposed Umpqua Pulp & Paper Co., 100-ton sulphite pulp mill near Reedsport, Oregon, W. L. Nederhoed, one of the backers of the project, declined to talk for publication.

"I don't mind saying, though, that the matter of financing is arranged," he stated. "Other details are being worked out rapidly, and you will have a complete story as soon as it breaks."

The Portland offices of the company were recently moved from the Bedell to the Lumbermens Building.

Osmund Joins Leadbetter Organization

T. Osmund, formerly president of the Tumwater Paper Mills Co., Tumwater, Wash., has been named assistant manager of all Leadbetter mills, with headquarters in Portland. Mr. Osmund assumed his new duties April 1.

The Leadbetter mills include: Oregon Pulp & Paper Co., Salem; Columbia River Paper Mills, Vancouver, Wash.; California-Oregon Paper Mills, Los Angeles; and the Vancouver Kraft Co., Ltd., now rebuilding at Port Mellon, B. C.

Major Porter Honored

Major O. M. Porter, executive secretary of the American Paper & Pulp Association, has been re-elected a director of the Swedish Chamber of Commerce of the United States of America, to serve for a term of three years. This selection is not only a tribute to Mr. Porter's position in the industry, but also an indication of the useful contacts which have been established through the Chamber for pulp and paper manufacturers who have visited in the United States and the Scandinavian countries.

Low Water Slows Up Mill

Operations at the Washington Pulp & Paper plant in Port Angeles were slackened for a time in March on account of a shortage of water that resulted in a loss of power from Elwha river generating dams. Heavy rains late in the month provided the needed water and sixty men who had been idle for a few days returned to work at the mill.

Staff Changes at Hawleys

Several resignations from old time members of the staff of Hawley Pulp & Paper Co. are announced. Grant Olds, who for 20 years has headed the mechanical department, left the company's service March 15 as did Jack Johnson, machine room superintendent, formerly of Camas, and Mark Chapman who has for many years been yard superintendent.

New Bag Machines Arrive

The first of a battery of new high speed bag machines has arrived at Camas from Brooklyn, N. Y. The machine has a capacity of 250 completed bags per minute.

Meldrum Heads Alaska Timber Cruisers

Don Meldrum returned again to the North on April 6 to head a party of cruisers that will continue their surveys of the Tongass National Forest pulp timber looking to the eventual establishment of pulp and paper mills in Alaska by the Zellerbach interests and George T. Cameron of San Francisco. The present year will be the third season that work is being carried forward.

Much of the work is purely pioneer in character. This year Mr. Meldrum's survey for the Zellerbach interests will consist of an intensified reconnaissance of the stands on Revillagigedo Island (on which the city of Ketchikan is situated), Cleveland Peninsula and the Eastern slope of Prince of Wales Island. All this territory is tributary to Ketchikan.

For the Cameron interests in the Juneau district, slightly farther north, the party will examine the East slopes of Admiralty Island and Chicagof Island to supplement the more extensive surveys completed in the northern area last year.

Mr. Meldrum went North in March on a preliminary trip to Ketchikan and Juneau for the purpose of making arrangements for the summer cruise. Floating camps and boats used last year have been overhauled at Ketchikan. Ten cruisers and forest engineers left Seattle on April 11 to join Mr. Meldrum. Some seven or eight members of the party last year remained in Alaska over the winter and awaited the coming of the balance of the party at Ketchikan. Field work commenced on April 15.

The base camp consists of quarters for 20 men, mess house, draughting room, etc., constructed on two large barges. These are moved from place to place as the work progresses. In making the cruises a strip along the shore from one to four miles wide is covered from the base camp. The inland areas, sometimes extending from 10 to 14 miles from tidewater, are mapped and estimated from spike camps established by packing from the main camp.

At the best the work is exacting and has injected into it plenty of "roughing it". The country being cruised in extremely rugged, sharp slopes coming directly down to the salt water in many cases. The predominant species are Western Hemlock and Sitka Spruce.

The cruising party, which concerns itself only with the timber surveys, will be in the field for five or six months. Water power reconnaissance is being carried out by another group.

Spaulding Plans to Increase Capacity

At the annual meeting of the Spaulding Pulp & Paper Co., Newberg, Ore., held in March, the report of President C. K. Spaulding for 1928 showed an operating deficit of more than \$70,000. This all occurred during the first seven months of the year and the installation of some new equipment, and more efficient arrangement and handling of the plant during the last five months changed conditions so that a small profit was shown during the last five months of the year.

The very decided drop in prices of unbleached pulp was attributed by President Spaulding as the cause for the loss in operating revenues. In 1925 pulp brought \$62 a ton. In 1926 it brought \$68 a ton. In 1927 it had dropped to \$60 a ton, and in 1928 it dropped to \$53 a ton," he said.

The president's report called attention to the high quality of pulp being produced in the local plant and urged the need for additional capital amounting to \$250,000 with which to double the present capacity of the pulp mill and also \$140,000 for the installation

of a bleaching plant. In speaking of this proposed addition, Mr. Spaulding told the stockholders that the former item would enable them to reduce the cost of producing pulp by about \$3 a ton. At present the pulp mill produces 45 tons and this would make it a 90-ton mill.

The stockholders voted approval of Mr. Spaulding's report and recommended that the directors take up the work of securing the additional finances for the suggested additions.

Election of directors resulted in the selection of the following: C. K. Spaulding, J. C. Compton, H. M. Hawkins, H. C. Spaulding, Leland Johnson, L. B. Ferguson, E. Fred Emery, R. J. Moore, G. W. James, Nelson C. Bowles, Oscar P. Closset, Carl Gerlinger and E. C. Wright.

Consolidated Water System Vetoed

The vetoing of the bill which would have enabled the city of Aberdeen to sell part of the water output of its new industrial system on the Wynooche river to the city of Hoquiam for domestic and commercial use, was a distinct blow to both cities, according to popular expression by Grays Harbor business men.

The plant was built primarily to enable the city to offer cheap water to pulp and paper concerns. These have failed to develop and the system is about completed. While eventually the system is expected to pay big dividends, the problem of doing something with the water during the first few years seemed in a fair way to being solved when Hoquiam became interested in taking over the distribution system of its domestic system and buying Aberdeen water for domestic use. It was also rumored that industries in Hoquiam would shortly be in the market for this water. The whole scheme was quashed by Gov. Hartley's veto. So important was the plan considered on the Harbor that since the veto there has been agitation to override the veto by consolidation of the two cities, which would enable the sale of the water almost any place on Grays Harbor.

Fibreboard Completes New Dock

Fibreboard Products mill at Port Angeles recently put to use its fine, new wharf, which has a berthing frontage of 260 feet and provides a 30-foot depth of water at low tide. The dock was completed late in March by Owens Brothers, Port Angeles contractors.

About 800 to 1,000 tons of freight, incoming and out-going, will be handled over the new structure each month. In all the years of operation of the Fibreboard mill the plant has never had a dock of its own, but has been forced to carry its freight by truck to and from privately-owned and municipal terminals. The improvement had been planned for years, but its construction was not realized until this spring.

The main dock is connected to the mill itself by an 800-foot pier. On the dock is a warehouse, 28x260 feet in dimensions.

Allen Promoting Another Mill

A. V. Allen, prominent Astoria, Oregon, lumberman, is reported to be promoting a wood pulp mill for Bay City in the Tillamook Bay district in that city. Water for the project would be supplied from the Wilson River, it was said.

Mr. Allen, who has been active in promoting the projected Northwest Pulp & Paper Co., for his home town, could not be reached for a statement.

T-R-A-D-E - T-A-L-K

Devoted to the Paper Trade of the Western States

Seattle B. M. & T. Division Remodels

Spring house cleaning was entered into in a big way by the Seattle Division of Blake, Moffitt & Towne this year, and when the carpenters, painters and glaziers declared the job finished, not only was the sales and office floor completely altered but the entrance to the building had been shifted from the Utah street side to Atlantic street. A new truck, brilliantly painted in the firm's colors of red, white and black, has been added to the delivery fleet.

At the left of the new entrance is found the newly established sales promotion department, managed by E. L. Hobbs. This department, designed to render advisory service to advertisers and printers, has gathered a collection of fine printed specimens, which includes samples of artistic shop work from European, South American and Oriental creative printers as well as from Pacific Coast and United States shops.

A display room that has all the appearance of a country general store with a paper and stationary complex is another feature of the new arrangement. Here are found everything from paper poker chips to glove boxes and paper display cases for flash lights and fountain pens.

A battery of 14 desks, each with a salesman's name on the side are arranged in two rows in the sales department.

Five glass enclosed offices line the south wall. The third office is occupied by J. C. Whitelaw, manager of sales, and Frank Carson, purchasing agent. To the right of the sales manager's office is the office of J. W. Thompson, vice president and manager of the Seattle Division, working in co-ordination with O. W. Mielke, Portland, president of the North West Division. E. H. Pope, credit manager, together with his staff has the office to the left of Mr. Thompson's.

The entire office, including the large non-enclosed portion wherein the stenographic force, files and cashier's desk are located, has been re-tinted and re-decorated, the ceiling having been stripped with cloth to prevent dust from sifting down when cases and stock are being shifted in the upstairs supply rooms.

Zellerbach Holds Its Own Convention

The annual convention of the Zellerbach Paper Co. is to be held in San Francisco May 13, 14 and 15 and will be attended by managers of the firm's larger divisions. The final day of the convention will be a Standardization Meeting. This is the nineteenth annual convention of its kind held by this firm. M. R. Higgins, chairman of the board of directors, will preside.

McDonald Directs Coarse Paper Sales

R. A. McDonald has been named director of sales for the manufacturing units of the Crown Zellerbach Corp., which are making coarse paper. Mr. McDonald formerly was with the Western Waxed Paper Co. of Oakland, Calif., and joined the Crown forces when that firm took over Western Waxed.

Tompkins Journeys East

George I. Tompkins, vice-president and general manager of the Sierra Paper Company, Los Angeles, left Los Angeles on March 28, for Chicago, where he went to attend a directors meeting of the J. W. Butler Paper Co. Mr. Tompkins planned to remain in Chicago a week, and while in the East will visit St. Louis and Omaha. He expects to reach California about the middle of April to be present at a committee meeting of the program committee for the Pacific States Paper Trade Association's convention, he being chairman of this committee. At this meeting final program details will be decided upon.

Specialty Lines Appealing to Jobbers

With the competition ever sharpening in the more common volume tonnage grades of paper the jobbers are finding their margins on these grades being whittled to the irreducible minimum. Consequently they are turning more attention to the specialty grades which, while not showing any impressive tonnage, are nevertheless better in point of profit margin.

These ideas were presented by Norman A. Buist of the Buist Co., San Francisco and Los Angeles, in the course of a trip through the Pacific Northwest. Mr. Buist is introducing a new folder distributed by the McLaurin-Jones Co., makers of gummed label papers. The folder is designed to accommodate a series of booklets on gummed papers and is, in fact, a very complete work giving the "A to Z" of gummed label paper uses.

This type of promotional sales work is designed to give the jobber some definite sales helps, Mr. Buist explained, and shows the jobber salesman how he can open new fields for his papers.

"To show a profit is the aim of every jobber," Mr. Buist pointed out. "But on some tonnage lines the results sum up as lots of work and little profit, although the volume is great. I think there is a tendency now among the jobbers to cultivate these specialty lines and let the volume take care of itself, because the possible profit margins are so much greater in the specialty business."

It's An Age of Color

Bright colored book papers are becoming more and more popular for catalogs, announcements, folders and the like, according to W. B. Maxwell of the General Paper Co., San Francisco.

Mr. Maxwell reports that the customers of the General Paper Co. are approving highly the new line of colored suede book stock manufactured by the firm of Dill & Collins, Philadelphia.

Grocer Enters Paper Field

M. A. Hillebrunner, for 14 years a successful grocer, has handled so much paper during all that time that he has concluded he might just as well handle paper exclusively, so has cast his lot with the Carter, Rice & Carpenter Paper Co. of Denver. He has been assigned as salesman for the wrapping department.

Del Monte in May!

Watchword of Paper Trade Association

MAY time is play time and convention time for the members of the Pacific States Paper Trade Association, who gather at Del Monte, Calif., for their annual meeting, May 9 to 11, inclusive.

Bigger and better than ever will be this year's convention, according to the association officials. Last year 128 attended and early in April this year reservations had been received already for 101, with many members and guests to be heard from.

Delegates from the paper trade houses are expected from the north and south and a larger number of paper mill officials than ever attended before will be present from east and west.

This year's meeting will be honored by the presence of two national trade association chiefs. One is Harry W. Mathewson, of The Paper Supply Co., Minneapolis, president of the National Paper Trade Association, and the other is Sydney L. Willson, of the American Writing Paper Co., Holyoke, Mass., president of the American Paper and Pulp Association. Both these executive officials are to speak at Del Monte.

Tompkins Plans Program

George I. Tompkins, Los Angeles, Sierra Paper Co., is chairman of the program committee and already has an interesting and helpful series of topics drawn up. Mr. Tompkins announces that the guest speaker at the convention banquet, Friday evening, May 10, will be Rufus Von Kleinschmidt, president of the University of Southern California, Los Angeles, whose topic will be on the subject of the relations of the United States with the republics of South America.

This is to be the twelfth annual convention of the association and the eleventh annual golf tournament, which is staged each year by the millmen, who attend the meeting as guests of the tradesmen. This discrepancy is explained by the fact that no golf tournament was held at the first convention twelve years ago.

Prizes for Turf Diggers

As usual, the committee in charge of the golf tournament is getting together a splendid list of prizes and promises a number of extra events on the links, in which the members and guests may compete. The golf committee this year is the same as last year: Harry Goedje, Crown-Willamette Paper Co.; Augustus R. Johnson, Everett Pulp & Paper Co.; M. M. Baruh, Crown Zellerbach Corp., and J. R. Miller, California Cotton Mills.

Keener competition than ever is expected in the golf tournament this year and a well-trained group of niblick wielders is expected to come up from Southern California to try to wrest the honors away from the San Francisco section. Last year Frank Stratford, San Francisco, Zellerbach Paper Co. took the championship, defeating R. A. McDonald, San Francisco, Crown Willamette Paper Co., in the finals. The handicap committee is peering closer than ever at the handicaps, so that none may slip anything over. This year close battles are looked for, also, in the ladies' putting contest and the gentlemen's driving contest.

The golf dinner will be held Saturday evening, May 11 and efforts are being made to have Fred Wight, of the Crown-Willamette Paper Co., preside again as toastmaster. Mr. Wight has done the honors very capably for two years and this year is inclined to want someone else to sit at the head of the table.

Among the western representatives and western millmen who will attend, in addition to Presidents Mathewson and Willson, are R. S. Madden, Holyoke; W. J. McCormick, San Francisco, and E. P. Wesson, Seattle, American Writing Paper Co.; Earl Van Pool and Lincoln Older, San Francisco, The Brown Company; B. P. Jaggard, San Francisco, and C. C. Hatch, Los Angeles, Cascade Paper Co.; F. G. Wight, H. A. Goedje and G. J. Ticoulat, San Francisco, Crown-Willamette Paper Co.; William Howarth, Everett, Leonard Howarth, Santa Rosa; J. L. Murray, Everett; H. E. Stewart, Everett, Gus Johnson, San Francisco, and A. A. Ernst, Los Angeles, Everett Pulp & Paper Co.; Horace McGimlin, San Francisco, Gilbert Paper Co.; V. N. Savale, San Francisco, George La Monte & Sons; I. McHenry, Chicago, Mid States Gummed Paper Co.; Neil B. Sinclair, Los Angeles, Nashua Gummed & Coated Paper Co.; A. B. Galloway, Salem, Ore., Oregon Pulp & Paper Co.; George R. Davis, San Francisco, and E. V. Johnson, Springfield, Mass., United States Envelope Corporation; George Olmsted, Chicago, S. D. Warren Co.; D. L. Maxwell, Palo Alto, Calif., The Tissue Co.; W. J. Gray, San Francisco, The Patterson Parchment Paper Co., and R. F. Reid, San Francisco and L. F. Foster, Tacoma, the Union Bag & Paper Power Corp.

New Butler Price List Out

The Denver branch of the Butler Paper Co. has just released the first spring price list supplement containing all the new lines taken on and some minor price changes.

Smith Takes Trip Through Northwest

"Business is good." That sums up the conclusions drawn by Edward N. Smith after making a swing through the Pacific Northwest territory from his headquarters in the Insurance Exchange Building in Los Angeles.

Mr. Smith has been in one form or another of the paper business for the past 25 years. Three years ago he left a general managership of the Tuttle Press at Appleton, Wis., and settled in the Southern California metropolis because he liked the Pacific Coast. Since that time he has given Pacific Coast representation to the Tuttle Press Co., the Crystal Tissue Co., makers of fine wrapping and decorative tissues, and the Rhineland Paper Co., of Wisconsin, known among other products for their glassine papers.

Mr. Smith reported that he found a general optimistic view toward future business prevailing among the Pacific Northwest jobbers, the general feeling being

that business would continue along a healthy level. Jobbers are now beginning to think of Christmas holiday wrapping papers.

"Mr. Smith showed some samples being offered by the Tuttle Press this year. "The old holly designs seem to be going out," he remarked, "but a distinctive holiday design is wanted nevertheless. This brings out designs of reindeers, Christmas trees, snow flakes and other characteristic symbols of the season."

Mr. Smith headed south again from Seattle on April 2, going to Portland and to San Francisco by rail, from which point he would motor to Los Angeles.

Leddy Is Now Personnel Manager

T. A. Leddy some little time ago was made operating and personnel manager at the Los Angeles branch of the Zellerbach Paper Co. Previous to taking up the activities of this position, Mr. Leddy was with the Zellerbach branch at Fresno, Calif.

Although Mr. Leddy has been connected with the paper business over a relatively short period of time, he comes to the business with a background of business experience gained during eight years spent with the Sunland Sales Association, in which time he was connected with the traffic and sales department, as well as doing much development, research, and quality inspection work, both on this Coast and in New York.

In the Zellerbach Los Angeles branch, Mr. Leddy is directing his efforts to securing high standards in service, bringing the right people into the organization, and stimulating morale.

When Boulder Dam Goes Boom

J. Arthur Kelly, manager of sales for the Sierra Paper Co., Los Angeles, and Jay Piper, one of the oldest country salesmen of the Sierra sales force, recently made a trip to Las Vegas, Nevada, which the Boulder dam project brought into prominence, and where, Kelly facetiously remarks, people have heard of the boom and still are waiting for it to materialize. As a market for paper, Mr. Kelly is inclined to think that it will be a year before there will be any great demand for paper in Las Vegas. The city has two daily newspapers, Mr. Kelly reports. The trip was made in Mr. Kelly's automobile, and the roads were found to be good.

Illustrated Price Books for Salesmen

The Carter, Rice & Carpenter Paper Co. of Denver has just issued a new illustrated price book for the benefit of salesmen. All items of the Carter, Rice & Carpenter line, including all specialties handled, are handsomely illustrated in their original colors, eliminating the necessity of the salesmen carrying samples. The colored illustrations serve to show the customer just what he is getting just as well as actual samples could do. Styles of all paper cut to fit the salesman's book are also carried.

Longview Mill Takes Seattle Waste Papers

Officials of the Pacific Straw Paper & Board Co., of Longview, have announced that long time contracts have been signed with the Seattle Times and the Seattle Star, to take their accumulated waste paper. The paper is baled in a Seattle branch plant and brought to Longview in carload lots, where it is used in the company's plant in the manufacture of chip board.

New Stationery Cabinet Appears

A new stationery cabinet has made its appearance in Denver. It is made in secretary size with a drop front. Printers and stationers have given the new cabinet whole hearted approval, as it aids considerably in display and in being inspected by customers. The fact that the cabinet contains 125 sheets and 100 envelopes should make it popular with customers who have considerable correspondence and don't like to be bothered with the old two dozen lot boxes. The new cabinet is being manufactured by the Carter, Rice & Carpenter Paper Co. in Denver.

The envelope business of the company is expected to show considerable increase due to the fact that a new power machine for blind imprinting has been installed and set to work.

Dixon Company Adds Warehouse Space

The Dixon Paper Co. of Denver has been encountering considerable difficulty in securing sufficient warehouse space. Recently the firm rented a building close by on Blake Street, and it was thought the warehouse problem was settled for a time at least. The need for additional space was felt almost immediately, however, and a building on Market Street affording two floors and a full basement was rented.

It's a Real, Real Red, Men

If one desires to be hit directly in the eye, he has only to walk up Los Angeles Street in Los Angeles, and let his gaze rest on the south wall of the building of the Los Angeles division of Blake, Moffitt & Towne, which bears a newly painted sign with a red background, a red so vivid that it probably is just as well that no longer are male cows herded up Los Angeles Street.

Seriously, this red, black, and white sign is one of the most fetching of its kind to be found in Los Angeles. The colors and design used on the sign are the same as are carried out on the firm's calendar, and other forms of advertising. Eventually it is planned to have the firm's trucks all painted a cream color, and then enamelled plates carrying out the colors and design of the sign are to be placed on them.

Denver Business Prospects Are Bright

Denver business for the first quarter of the year has shown a decided improvement over the first quarter of 1928 with the tendency upward. This tendency has been noted since last November. From that month up through February the index number of the printing industry had jumped from 57 to 72. The close correlation of the printing trade with paper sales would indicate a similar growth in the latter field. The agricultural outlook is exceedingly bright with nearly every farmer, especially in the irrigated districts, having contracted for his crops at a fair figure. With greater precipitation than in several years those "in the know" predict the biggest crop since the war. Moreover, several important decisions during the winter have assured the shippers more equitable rates.

Appoints Pioneer Paper Representative

While at Sunnyside, Wash., early in March, H. H. O'Conner, Northwest manager of the Pioneer Paper Co. addressed the annual meeting of the Tum-A-Lum Lumber Co. He recently appointed F. L. Ballou, of Sunnyside, Yakima district representative for the Pioneer line of roofing papers and supplies.

Coast Pioneered the Paper Towel

Although it is not generally known, paper towels, which are used in practically all public places in the United States today, are a Pacific Coast origination. The product, according to L. J. Arms, sales manager of the San Francisco division of National Paper Products Co., was first manufactured about 1912 for distribution by the Zellerbach Paper Co. Later production and distribution was taken over by the National Paper Products Co., a Zellerbach subsidiary, and at the present this organization is said to be selling more towels than any other American firm.

In order to comply with the slogan "A Clean Towel for Every Hand" a machine was designed by the company which turns out 880 towels per minute, folded, counted and ready for distribution without being touched by human hands. The towel, made with a special hem to prevent tearing when removing from the cabinet and with deep crinkles for the purpose of quick absorption and the prevention of rapid spreading of moisture, is manufactured from spruce pulp.

Known as "Public Service Towels" the distribution of the product is handled through the installation of cabinets for new customers. At the present the company is completing a new type of cabinet which is easier to fill than the old type and is also considered a more attractive holder than the old. To facilitate re-filling the new cabinet is opened from the bottom.

Mr. Arms has handled the distribution of the paper towels since Zellerbach first inaugurated the line in 1912. Another example of Mr. Arms' pioneering is the introduction of "Slip Away" toilet seat covers. The product, also a Coast invention, is for use in public and semi-public buildings. About 350 installations have been made to date on the Coast.

The covers are of light weight tissue and are sold in rolls of one hundred, packed fifty rolls to the carton. The self depositing feature is unique and is quite important in the elimination of the paper because it does not clutter up the lavatory or fill the waste baskets. In the cutting of the cover a flap is left free so that when placed on the seat it will fall to the water and when the toilet is flushed the cover will wash away. Mr. Arms points out that the seat covers are economical because they pay for themselves in saving of paper towels, etc., which are often used in their stead. The company is also planning to retail them in envelopes containing a few covers for individual use to sell for five cents.

Ready-to-Wear Houses for Logging Camps

The Crown-Willamette Paper Co. has placed an order for 22 readi-cut houses with a Portland branch of a national readi-cut company, according to the local manager of the house-building concern. The houses, which are for the purpose of housing employes at the Cathlamet, Wash., logging camp, will be assembled at the camp late this month. They are to be modern in every detail.

Making Paper Bags at St. Helens

Paper bag production was started last month by the California Bag & Paper Co., at the new St. Helens, Oregon, location. Three more carloads of bag machinery and equipment were received later in the month from the plant's old location at Emeryville, Calif., and it was expected that production would be materially increased at St. Helens early in April.

About one half of the equipment is now installed at St. Helens. Although the Emeryville plant is still in

operation, production is being decreased in the same ratio that the St. Helens plant is being increased. It is expected that the California plant, which is being moved in its entirety to St. Helens, will be completely dismantled within the next 30 days.

LEO A. ROMER

Recently Appointed
Sales Manager

TAVERNER & FRICKE
PAPER CO.

Los Angeles



Two Zellerbach Buildings

Two Zellerbach structures will face each other on Sansome Street in San Francisco next year. One is the Crown Zellerbach Building, being remodeled at 343 Sansome Street and the other is a new 25-story building which is to be built soon across the street by I. Zellerbach and his associates. Mr. Zellerbach is head of the Crown Zellerbach Corporation and it has been announced that this new building is to cost around \$3,000,000. The Crown Zellerbach Building is to be headquarters for the corporation and several of its subsidiaries.

Tea for More Than Two

The tea wagon in the office of Louis A. Colton, director of purchases, Zellerbach Paper Co., San Francisco, was kept busy recently entertaining eastern paper mill guests, among whom were:

Leon B. Steenbock, Chicago, Cromwell Paper Co.; Aaron C. Bagg, head of the Parsons Paper Co., Holyoke, Mass.; on a pleasure trip to the Pacific Coast with his son, Dr. Thomas Bagg; Irving F. Lowe, president of the Falulah Paper Co., Fitchburg, Mass.; M. A. Park, Holyoke Card and Paper Co., Springfield, Mass., this was Mr. Park's first visit to the coast in seven or eight years; Harry J. Fleming, Racquette River Paper Co., of Potsdam, N. Y., and the Leader Card Works; Joseph Pirie, Fox River Paper Co., Appleton, Wis.; Milton Markewitz, head of Bushong & Co., prominent printers and lithographers of Portland, Ore.

Harwood With Zellerbach at L. A.

E. J. Harwood, formerly with the sales force of Johnson, Carvel & Murphy, Los Angeles, later becoming superintendent of plant operation for the Steward Paper Products Co., is now with the sales force of the Los Angeles branch of the Zellerbach Paper Co.

Cool Up Here in the Summer, F. L.

F. L. Shafer, Los Angeles, Pacific Coast factory and mill representative for paper and paper products, and one of the old timers in the paper game, who thinks and talks paper all the time, is planning a trip up the Coast as far as Washington.

Among Us Old Timers

George Ide Tompkins, vice president and general manager of the Sierra Paper Co., Los Angeles, Calif., like a good many other loyal citizens of Los Angeles, was born in the state of Michigan, spending his childhood days in the big timber of Wisconsin. At an early age, after his parents and he had moved to Chicago, George started his business career in the paper business, and has stuck to it ever since. In fact, for over 30 years, since the J. W. Butler Paper Co. gave him his first job, he has been connected with the Butler organization.

Like many an ambitious youth, Mr. Tompkins started to work in the stock department to learn the business. But he did not remain there long, being pro-



GEORGE IDE
TOMPKINS

Vice-President and General
Manager

SIERRA PAPER CO.,
LOS ANGELES

moted from time to time to better positions until he became traffic manager and superintendent of the operating department.

Then Mr. Tompkins was sent to Texas to reorganize the Southwestern Paper Co., by which name the Butler divisions at Dallas and Houston were known.

After heading this Texas organization as vice-president and general manager covering a period of four years, he was transferred to Kansas City, Mo., where he organized the Butler division known as the Missouri-Interstate Paper Co. He was also at that time elected a director of Butler's division at St. Louis, Mo., called the Mississippi Valley Paper Co., which is now owned by a brother, J. Howard Tompkins, and associates. After eight years of successful administration at Kansas City as vice-president and general manager, Mr. Tompkins was called to Butler headquarters at Chicago to become chairman of their executive board.

After two years' service in this capacity, he was then moved to San Francisco, where he organized the Butler Paper Corporation purchasing and export office. Shortly after this, he was asked to return to Dallas, Texas, to again take charge of the Southwestern Paper Co., as vice-president and general manager. Mr. Tompkins' stay in Texas this time was but three years; however, during this period he established another successful Butler division of the Southwestern Paper Co. at Fort Worth, Texas.

In June, 1925, Mr. Tompkins was elected vice-president and general manager of the Sierra Paper Co., which is the Butler's Los Angeles division; and he has been active ever since in the upbuilding of this busi-

ness. The result is shown in the strong position the Sierra Paper Co. now holds in Southern California paper jobbing industry.

In recognition of Mr. Tompkins' well-known ideas and principles of paper merchandising, President F. M. Couch of the Pacific States Paper Trade Association, appointed him chairman of the Program Committee for the annual Del Monte meeting to be held May 8 to 12 of this year.

Mr. Tompkins is strongly in favor of active co-operation between manufacturer and merchant, and a greater degree of active co-operation among all paper merchants. It is the belief of Mr. Tompkins that manufacturer, merchant, and printer are partners and mutually vitally interested in maintaining a healthy market whereby all interested secure a proper return on capital invested. In the hope that a better understanding may be reached and more sound trade practices adopted, he intends to have as one of the important subjects for review at the Del Monte meeting of 1929—"Practical Co-operation of All Interested in the Sale of Printing Papers". A written paper will be presented, outlining what can and should be done; then an open discussion by non-association paper merchants as well as association members regarding the subject.

Mr. Tompkins expresses the hope that every paper merchant west of the Rocky Mountains, who merchandises printing papers, will be present at the Del Monte meeting to take an active part in what should prove to be one of the most important meetings yet held by the Pacific States Paper Trade Association.

B. C. Exports Show Increase

Total pulp and paper shipments from British Columbia during the year 1928 amounted to 301,211 short tons, as compared with the previous high mark of 243,671 short tons in 1927, according to figures just released.

Details of shipments during the year are as follows: Argentina, 34,045 short tons; Australia, 14,500 tons; Central and South America, 1,667 tons; China, 35 tons; Japan, 57,230 tons; New Zealand, 20,548 tons; United States, 172,017 tons; other countries, 1,119 tons.

Smelt Don't Object to Paper Mills

Millions of smelt last month proved conclusively that they have not the slightest objection to paper mill waste, when after a two year absence they returned to the Cowlitz river for the annual spring spawning run.

For as long as history records, these little fish have used the Cowlitz as a spawning stream. In 1927 and 1928, for some unknown reason, they deserted the Cowlitz and chose the Lewis river, another tributary 20 miles further up the Columbia. Immediately a great hue and cry went up, that the Pacific Straw Paper & Board company's plant, located on the Cowlitz at Longview, and the Longview Fibre company's plant, located on the Columbia just below the mouth of the Cowlitz, were responsible. The return of the smelt this year, in as great a run as the Cowlitz ever witnessed, proved the case of the paper mills.

Gamble Presented With Gift

A few days before he left for New York, John Gamble, lately the general superintendent of Camas division of Crown Willamette Paper Co., was called on at his home by a delegation representing every department of the big mill, and presented with a finely carved gold watch.

Paper Containers for Frozen Fruit

With home refrigeration becoming daily more popular the modern housewife is able to prepare for her table frozen delicacies both in fruit and vegetable dishes which were heretofore unthought of.

Consequently canners and packers of foodstuffs for milady's table have placed new products on the market which before this could only be handled where refrigeration was possible. Among the frozen delicacies which are rapidly gaining favor are frozen berries and it is of especial interest that the greatest amount of frozen berries, in one and two pound containers, are being packed in fibre, hermetically sealed cups.

The rapid rise in the popularity of the one and two pound fibre cups for home consumption of frozen berries is illustrated in the Pacific Northwest, the seat of the berry industry on the coast. The small lot packs were first introduced in 1926, and although brokers put in some promotion work on the line not enough were sold to be recorded. The market remained dormant in 1927 but in 1928 434,015 one-pound containers were packed and distributed, and brokers predict that the 1929 pack will be well over a million pounds.

Up to the present the cold pack in cartons has been mostly in strawberries but experiments have been successfully conducted in packing other berries and also vegetables. Properly prepared fruits and vegetables stored in the proper manner retain the qualities of the fresh products indefinitely, and when removed from the cold storage do not possess a "preserved" or "canned" flavor.

By this method it is possible to serve fresh berries and seasonal vegetables throughout the year, thus increasing markets tremendously. The economy advantage is easily recognized. Frozen berries retail at from 25 to 35 cents per pound during the same season of the year when imported fresh berries from Florida are retailing at from 60 to 80 cents a pound.

The part paper cartons are destined to play in the growth of the frozen fruit industry is indicated by a statement from M. A. Joslyn of the Fruit Products Laboratory, University of California. Mr. Joslyn says, "A closed container is desirable not only from the standpoint of eliminating foreign odors but also to facilitate the shipment of the prepared product. We at the Fruit Products Laboratory have arrived at the conclusion that a paraffined cardboard container is the logical container for frozen fruit. A paraffined paper container appealed to us because, first, it is relatively cheaper than other containers, and second, it is more inert and does not, for example, bleach berries that come in contact with it, nor does it affect the flavor of the fruit."

Working On Neah Bay Road

Construction of the nine and one-half mile road that will help connect Neah Bay, important western Olympic Peninsula pulpwood center, with outside points, was well under way early this month. Contractors began clearing of the right-of-way in early March, under a contract with Clallam county.

The county recently sent application to the war department for a permit to build a bridge across the Sekiu river that will be a part of the Neah Bay road. The span would be 24 feet above high water, near the mouth of the river, and would provide clearance for pulpwood scows that the Washington Pulp & Paper Corp. intimates it will use on the stream.

To start the grubbing and clearing of a road across

the Neah Bay Indian reservation that will connect the town itself with the Clallam county thoroughfare, the Indian department at Washington, D. C., recently allocated \$7,000 to the project. More money for the Indian department's share of the road will be sought next December.

Faster Ship Service to South America

One of the greatest obstacles to the opening of paper markets in South America for Pacific Coast manufacturers has been the length of time required for shipments to reach their destinations. Direct shipments have always been slow and shipments have often been required to go through the canal to New Orleans to be re-shipped—with subsequent delay.

Beginning with the August sailings of the present year, the Westfal-Larsen Line will inaugurate a direct service to Brazil; vessels will be routed via the Panama Canal direct to Rio de Janeiro and Santos, thence to Uruguay and Argentina. The voyage from the Coast to Santos will require but 25 days, a sailing time that will compare favorably with East Coast freighter service.

As another move in speeding up the South American service, the Westfal-Larsen Line plans to replace the liners at present making the Pacific Coast to Argentina run with modern fast vessels capable of 14-knot speed and equipped with first class accommodations for 12 passengers.

Pacific Coast paper exporters will not only benefit by the faster time to South American east coast ports, but the 22-day return trip will no doubt encourage South American exports to the Coast, with resulting betterment of trade relations and an increased interest in Pacific Coast products.

Fred Foote Opens San Francisco Office

Fred F. Foote has opened an office at No. 7 Front Street, San Francisco, to handle the California affairs of the Pacific Coast Paper Mills of Bellingham, Wash. Mr. Foote is an old-timer in the paper business, having formerly served at the Westminster Paper Co. plant at New Westminster, B. C. Elmer Herb, sales manager of the Bellingham company, was in San Francisco assisting Mr. Foote in opening the office.

German Engineer Inspects Coast Mills

Completing a short tour of the Pacific Coast mills, Otto Fischer, engineer, representing Maschnefabrik Buckau R. Wolf of Magdeburg, Germany, left Seattle for Germany via New York on April 11. Mr. Fischer was much impressed with the development of the pulp and paper industry on the Pacific Coast. He made a particular study of the new 120-ton sulphate pulp mill of the Union Bag & Paper Power Corp. and said in respect to it that it was "a wonderfully fine mill" and expressed some intention to build a mill like it in Germany. Mr. Fischer knew Joe Hedin, general superintendent at the Union Bag mill, before coming to the Coast.

Srere Visits Pacific Coast

Alfred Srere of the Miami Valley Coated Paper Co., of Franklin, Ohio, was a recent visitor on the Pacific Coast. In San Francisco he visited his mill representative, Ben Levison.

**Set-up
Folding
Corrugated
Solid Fibre**

BOARDS and BOXES

**A department for interests allied
with the pulp and paper industry**

**Board
Mills and
Paper
Converters**

Kerr Uses Care In Designing Boxes

Clarence B. Kerr, president and general manager of the Hollywood Paper Box Corporation, Hollywood, California, states that work is to start immediately on an addition to the Hollywood factory. The property and building of the new addition will comprise an investment of approximately \$125,000. The new structure will be three stories in height, and provide some 54,000 feet of additional floor space. It will be of the Mediterranean type of architecture to correspond with the present building, which is one of the handsomest industrial buildings in Los Angeles. The addition will be erected on the south side of the present building.



C. B. KERR

Hollywood, home of the motion picture industry, is a creative center for the artistic, and well-comes initiative and the expression of individuality. It has become a style center for clothing, and in many ways gives free rein to the original. Mr. Kerr, knowing his Hollywood, saw an opportunity for service that Hollywood appreciates, in providing a creative department in his factory, where two designers and an artist devote their entire time to originating novel designs.

Mr. Kerr is using some most effective and attractive advertising matter to bring out the selling value that the container plays in moving goods, and points out that an eminent psychologist has said that eighty-seven percent of all sales are made through the sense of sight.

"On the shelves of thousands of retail stores," says Mr. Kerr, "stand millions of paper boxes containing different products. Into these stores come millions of buyers with money to spend for these products. Many know what they want before they enter the store, having been sold by advertising, but many are shoppers."

"What governs their selection of a particular package? It must be the package itself to a great degree. Possibly, in certain cases, price may have some weight with the buyer. He does not know the quality of the goods he is buying, so this does not count in his decision. However, the container can suggest quality. It is our aim to produce paper boxes that have definite advertising value."

Mr. Kerr, who has had some 23 years' experience in the paper box business, established the Hollywood Paper Box Corp. in 1926. But not only has Mr. Kerr been able to establish this large paper box factory and create an extensive demand for its products, but he also has two other businesses which he directs, and still

finds time to play a stiff game of golf, and take a most active interest in association affairs. He is owner of an extensive automobile repair and servicing business in Los Angeles, known as the Master Service Co., and is president and general manager of the Ensenada, Mexico Development Co., the company having holdings comprising some 542 acres in Mexico, located on a bay, and which it is planned to develop along resort lines.

On This Year's Convention Program

When the curtain goes up on Act One, the audience will see an ancient, dilapidated paper box factory on the stage. By the time Act Two is reached the factory will be pepped up and improved considerably and then, presto! Act Three will show the finished product—a spick and span up-to-the-minute 1929 paper box plant, ready for efficient and economical operation.

This is a rough outline of the main theme of the 1929 convention of the Pacific Coast Paper Box Manufacturers Association to be held at Del Monte Monday, Tuesday and Wednesday, June 24, 25 and 26.

Each year the paper box association aims to make its convention as helpful and as practical as possible, so that each person attending will be able to benefit from the talks and sessions. Last year the "show" revolved around the handling of an order for paper boxes. It was a very interesting program, practical in every way. This year the idea will be to have the members go through the motions of rehabilitating an old plant.

During the program the delegates and speakers will discuss the various steps taken in the changing of the factory. Each point will be gone over; reasons for all actions will be given and the principal program speeches will be on subjects in connection with the remodeling of the plant.

W. H. Thomas, San Francisco, sales manager of Fibreboard Products, Inc., is general chairman of the committee in charge of the convention.

Louis De Jonge Representative Here

Frank C. Leppen, Chicago, western traveling representative for Louis De Jonge & Co., manufacturers of coated papers, spent March on the Pacific Coast calling on the paper box manufacturers. Several new lines of specialty papers are to be introduced by De Jonge on May 1, Mr. Leppen announces.

In Los Angeles and San Francisco Mr. Leppen participated in golf tournaments staged by the local members of the Pacific Coast Paper Box Manufacturers' Association and he did so well on the links that he hopes to get back to the coast for the 1929 convention at Del Monte, where he hopes to walk away with some prizes.

Going from Los Angeles to San Diego, Mr. Leppen took the airplane route and reports the trip one of the finest ever. The big Ford all-metal ship, a land plane, takes a course over the ocean, about a mile off shore, and doesn't head inland until it gets to La Jolla, near the southern terminus.

Two Top The Tournament

Twin champions—not champion twins—this month top the golfers of the San Francisco group of the Pacific Coast Paper Box Association, who held a regular monthly tournament in March at the California Golf and Country Club. The championship honors were split by Mike Devers of the Fleishhacker Paper Box Co., and Tony Korbel of the Consolidated Paper Box Co., each scoring 75 net over the difficult course.

Dick Brooks, sales manager of the Pacific Straw Paper & Board Co., San Francisco, was next on the list with a 76. Dick took it so seriously that he went home and caught the flu and was confined to bed during the early part of April. Will Kewell of the Western Paper Box Co., Oakland, and R. Thiebaut, of the Consolidated, came along next, each with a 77.

Other scores at the tournament were:

E. F. Wutham, Schmidt Lithograph Co., 78; Louis Thiebaut, Consolidated, 79; Louis Raisin, Consolidated, 81; W. H. Thomas, Fibreboard Products, Inc., 82; H. Zellerbach, Zellerbach Paper Co., 83; C. C. Cole, Illinois-Pacific Glass Co., 84; Gus Trout, Fleishhacker Paper Co., 84; Hugh Peat, coast secretary, 84; E. J. Farina, Fibreboard, 87; Frank Leppen of Chicago, representative of Louis De Jonge Co., 87; Jack Raisin, Consolidated, 88; J. A. Benedict, Western Paper Box Co., 90; H. W. Leslie, a guest, 90; W. F. Cole, Illinois-Pacific, 91; R. O. Comstock, Charles J. Schmitt Co., 91, and L. Adelstein, Fleishhacker Paper Box Co., 93.

On Friday, April 12, another golf tournament was to be held by the San Francisco paper box group at the Claremont Country Club back of Oakland. Will Kewell of the Western Paper Box Co. was to be the host.

Australian Carton Manufacturer Here

To study methods employed in the Puget Sound district by paper box makers, pulp and paper mills, J. Fielding, managing director of the company that bears his name at Sydney, Australia, made a tour of the Pacific Northwest in late March and early April. His Australian company manufactures cardboard boxes, corrugated containers and similar products.

Mr. Fielding comes to America every four or five years to study the latest methods. In previous trips he has gone through the Southern route, through Los Angeles, San Francisco, then east to Kansas City, Chicago and other points. The present year was his first visit to the Puget Sound district. He will spend three months here in America and return to Australia late in July.

The Australian manufacturers are making their board

from old paper and from pulp purchased either in Norway or in America, depending on prevailing markets, Mr. Fielding said. He is very much interested in developing the use of fibreboard containers for food products originating on the Pacific Coast for Australian export, particularly canned salmon. He made the suggestion that some trial shipments be made in fibre containers to study the possibilities under actual shipping conditions.

American at L. A. in New Building

The American Paper Box Company's plant now is nicely established in its new quarters at 5225 South Central Avenue, Los Angeles. The plant was moved from its former address on Twelfth Street, the first part of this year.

The plant's present building is a brick structure containing 8000 square feet of floor space, and H. A. Cole, general manager of the American company, states that the building and present equipment represents an approximate investment of \$50,000. Some \$10,000 worth of additional equipment was installed at the time the plant was moved to the new address.

A well arranged system of sky lights gives the plant excellent north light. The front part of the building contains the offices, the cutting and making, and the finishing departments, while in the rear are the shipping and storage departments.

The plant is devoted to the making of set-up boxes of all descriptions. Mr. Cole estimates that the new factory has twenty-five percent greater capacity than the previous one did.

The business was established some 12 years ago, and the plant has been moved several times in order to secure more floor space to keep up with the business growth.

Golf Is a Real Factor in Business

Los Angeles box manufacturers find that the time they take from their business to play golf together is time well spent. Not only is the exercise and relaxation a well worth while feature, but the comradeship and good spirit engendered by the year's golf tournaments are of great value to the harmonious progress of the box manufacturing industry.

San Diego Box Firm Reported Sold

The San Diego Paper Box Co., 450 4th St., San Diego, is reported to have been sold by the F. J. Weiss estate to Mr. Allan, formerly of Chicago. Curtis Cooper, who has been general manager of the organization for some time will continue in that capacity.

LOUIS DEJONGE & CO.

Chicago

New York

Philadelphia

FANCY — EMBOSSED — GLAZED PAPERS

FRANK C. LEPPEN, WEST COAST TRAVELING REPRESENTATIVE
FROM 600 W. VAN BUREN ST., CHICAGO, ILL.

California Box Makers Get Together

The joint meeting of the Los Angeles and San Francisco divisions of the Pacific Coast Box Manufacturers' Association, held at Santa Barbara on March 9, proved to be a most profitable one in promoting the good feeling that exists among the box manufacturers of southern and northern California. Although the weather man had it rain on Saturday, thus making golf impossible, following the business session, and the southern Californians had to endure considerable razzing about the climate in the southern part of the State, and couldn't convince the northerners that it was "low fog", the weather permitted the game scheduled for Sunday to be played.

Charles Ruble acted as chairman of the business meeting held on Saturday. The other members in attendance being: B. Brown, R. C. Comstock, H. Dunlop, W. Graham, R. J. Gruenberg, H. S. Harris, C. W. Hering, C. B. Kerr, W. Kewell, L. Raisin, C. Ruble, D. Sahlein, R. D. Schmidt, Jr., T. B. Seebaldt, A. E. Stein, L. Thiebaut, W. H. Thomas, G. A. Trost, Hugh Peat, and J. B. Bonnell.

The Trade Practice Resolutions of the Paperboard Industries Association were read and discussed. Mr. Gruenberg brought up a pertinent point when he questioned whether the resolutions, if enforced, would not hamper the industry by injecting politics into the business and allowing a small group of men to exercise an autocratic control. The majority of the members were of the opinion that this would not be the case but that if the resolutions could be enforced they would be of much benefit to the industry. Consequently, it was moved by Mr. Hering, seconded by Mr. Thiebaut and resolved that Mr. Peat, secretary of the Pacific Coast Association, be authorized to send a bulletin to all members requesting them to write or wire their indorsement of the Resolutions to the Paperboard Industries Association. This resolution was unanimously carried.

Oppose Cartright Act

Senate bill 617, introduced by Senator Carter for the purpose of repealing section two and a half of the Cartright Act, which, if carried, would deal a death blow to business and trade associations in California, was discussed and members were requested to take all possible action to prevent the passage of the bill.

Mr. Thomas told the group about the plans which are being made for the Fifteenth Annual Convention of the Association at Del Monte in June and the members were enthusiastic in their comment on these plans.

After a discussion of the minimum dues of the Pacific Coast Association, it was apparent that the sentiment of the group favored the reduction of the minimum in the hope that the membership could be increased by lessening the cost to the small manufacturers. It was moved by Mr. Peat, and seconded by Mr. Thiebaut that the following dues rates be added to those already established:

10 to 24 employees.....\$30.00 per year
Less than 10 employees.....\$12.00 per year

This motion carried unanimously.

At this meeting a new member was welcomed into the Pacific Coast Association, the new member being the Advance Paper Box Co., Los Angeles, represented by H. S. Harris.

Of course, the LaCumbra golf course is a tough one with all kind of hazards and much tall grass, but even so the box manufacturers wonder where all those golf balls went to, six or seven dozen balls having been lost in playing the thirty-six hole course. Dave Sahlein claims that he broke the course record for lost balls.

Consolidated Box Financing

With the announced purpose of financing additional expansion, B stockholders of Consolidated Paper Box Co., San Francisco, at a meeting in March voted to increase the amount of B stock from 120,000 shares to 200,000 shares.

Coincident with the increasing of stock President W. M. Warren stated that the addition of Boxboard Products Co., the York Stern Paper Box Co., and the Gilbert-Patterson Carton Co. was contemplated, and that this would give the Consolidated Paper Box Co. one of the most efficient folding box units on the Pacific Coast.

He also pointed out that the amount of business done by the Consolidated during the first quarter of this year was in excess of that done by the constituent companies in any like period in their history. Actual production economies effected by the consolidation are running in excess of \$75,000 a year, he said.

New Owners of Tacoma Carton Factory

Joe O'Reily and Dick Hughes, who have been employed by various Portland box makers for some time past, have purchased the Standard Carton Co., Tacoma, from W. E. Fitch. Mr. Fitch, who with R. J. Clark, bought the business last December, is understood to have taken a road position with an eastern machinery house.

Mr. Clark disposed of his interests to Mr. Fitch early in the year. Since then he has taken unto himself a wife and returned to his old position as city salesman for the Columbia Paper Box Co., Portland.

No News on Fir-Tex Plant

"You'll have to pass me up this month, said A. E. Millington of the Fir-Tex Insulating Board Co., when asked for a statement regarding the proposed mill at St. Helens, Oregon. "I fully expected that our plans would be matured early this month, and that I would be able to make a public announcement at this time. As it is, I cannot release anything for some time yet."

New United Box Factory Nears Completion

The new plant of the United Paper Box Co., 2001 Bryant Street, San Francisco, which, it is claimed, will be one of the finest of its kind west of Chicago, is rapidly nearing completion. The United company is a merger of the Mission Paper Box Co. and Scott Brothers.

Scott Brothers' plant at 1685 Howard Street, has been dismantled and the equipment moved to the new building, which is located at the address of the Mission com-

PRODUCTION OF BOXBOARD

February, 1929

Based on Reports to the U. S. Department of Commerce

	Production	Per Cent of Capacity	New Orders	Unfilled Orders End of Month	Stocks End of Month
1929—					
February	228,729	81.1	229,441	84,935	57,468
January	*248,249	*86.2	*237,716	*83,661	*56,610
1928—					
February	211,862	77.6	215,333	85,862	50,350

*Revised.

pany. Additional space has been taken at this site and a new three-story building is rising. There will be 60,000 square feet in the new plant, 30,000 feet in the eastern wing to be used for manufacturing and the remainder for storage.

Samuel Platt, president of the company, announces that only the most up-to-date equipment will be installed in the plant, with a view to producing paper boxes as economically as possible.

Schaub Invites Them

Charles F. Schaub, president of the Pacific Straw Paper & Board Co., Longview, Wash., was a Portland visitor early this month. While in the city, Mr. Schaub, who is a director of the Washington Manufacturers Association, in company with George G. Guild of the Columbia Paper Box Co., and past president of the Oregon Manufacturers Association, extended a cordial invitation to local manufacturers to attend the state convention of Washington manufacturers to be held this year in Longview the first week in May.

It is probable that a delegation of Portland industrialists, who distribute in southwestern Washington territory, will go by auto caravan to attend the annual state gathering, according to Mr. Guild.

Levison Favors the Klap Envelope

Ben Levison, San Francisco paper mill representative, reports that the American Envelope Co. of West Carrolltown, Ohio, is making a successful drive in the west on "Karrollton Klap" envelopes. Mr. Levison handles this line along the coast.

Himes Figured Out the Machine

There was something wrong with the system. That was apparent. They would crease the board by hand on a rubber reel machine, and fold by hand. To apply pressure the girls would sit on the piles of stock. Something wrong. One of the owners of the paper box factory, after studying over these production methods, finally sent East for a small machine to do the work.

The machine came, but no one knew how to make it work.

"Himes," said the boss, "you figure this out."

Finally Himes did succeed in making the motor run and in making the dies mean something. That was back in 1889, down in San Francisco. And because the boss told him to dope out the "new contraption" A. N. Himes claims the distinction of making the first machine made paper boxes on the Pacific Coast. Today Mr. Himes operates his own factory, the Oakland Folding Paper Box Co., 57th and Adeline Streets, Oakland, a modest but busy plant, steadily expanding its business of supplying the San Francisco bay district in California with paper boxes.

Mr. Himes is truly one of the "old timers" in the Coast paper box business. He started in the business in 1887 and he has never left it for any length of time. Let him tell some of the trials and troubles of the earlier days:

"Back in the late 'eighties' there wasn't the demand for paper boxes that there is now. As a commodity they were more of a luxury than the necessity of today. They had to be made by hand and the board from which they were made had to be shipped in from the East.

"I think I made the first machine-made boxes on the Pacific Coast, back in '89. Production problems became

simplified with the general introduction of machinery. Then some mills began to manufacture board on the Coast and that helped, too.

"With production problems taking less of our time we were forced to turn our attention to markets. It was no simple task to educate the retailer and producer to the advantages and economies of using paper boxes. Part of the job was to sell him the idea of lifting his commodity out of the ordinary and making it something he was proud of. Trends in merchandising demanded better forms of conveying the goods from retailer to consumer.

"Then one day some raisin growers decided to market a part of their crop in cartons and placed an order for four million cartons a year. Everybody thought they were crazy. Today, however, we know that these men were far-sighted, and not crazy."

With the fire of 1906 the firm Mr. Himes was with became inactive for a number of years. Later Mr. Himes joined the Fleishhacker company, rising to the general superintendency. Subsequently he was with the Mutual Paper Box Co. and the York-Stern Company, until 1922 when he founded the Oakland Folding Paper Box Co. He is today principal owner and general manager. The firm uses 700 to 1,000 tons of board annually and employs an average of twelve people.

Poultry Provides Big Egg-Case Business

Western pulp has replaced foreign pulp in the manufacturing of cardboard egg-case fillers at the Petaluma, Calif., paper box factory of E. F. Adams. Approximately 1,500 tons of pulp a year are used at the Adams plant. The switch was made recently because of delays and unsatisfactory shipping conditions and because the owners of the establishment found western pulp served their purpose just as well as the pulp they had been buying overseas.

The Petaluma plant is operated by the three sons of E. F. Adams and it does a big business in egg-case fillers, Petaluma being the metropolis of one of the world's great poultry centers. Frequently 10 tons of board a day are put through the Adams machines.

Equipment at the Adams establishment consists of egg-case filling machines and cutting and creating machines. Additional equipment may be purchased during the year just started.

Forty Million Boxes Used Yearly in S. F.

"San Francisco and the bay region uses between 30,000,000 and 40,000,000 'set-up' paper boxes annually, and more than \$1,500,000 is spent each year for these boxes," Morris Spiegelman, founder of the two largest furniture factories west of Chicago, told a salesman's meeting in San Francisco recently. "This big bill is only a start. By next year it will be \$2,000,000, and each year it will grow greater. This does not include folding boxes, which are fast increasing."

Union Bag Co. Advances Prices

Through the Denver representatives of the Union Bag Co., the Stone-Hall Brokerage Co., it is announced that prices on grocery bags have been advanced ten per cent. The cause is attributed to the firmness of the market. The shipments to the Rocky Mountain field are now being made from the new factory at Vancouver, Washington.

*New Types**New Models**New Machines*

EQUIPMENT

Manufacturers of, and dealers in, equipment used by pulp and paper mills, board manufacturers, converting plants, paper merchants, or any other branch of the industry may make their announcements in this department.

*New Dealers**New Branches**Appointments*

Bristol Has New Catalog

An illustrated catalog on the subject of Bristol's Automatic Electric Control Valves is being distributed to the trade by the Bristol Co., Waterbury, Conn.

The tremendous influence which heat has on the uniformity and qualities desired in thousands of manufactured articles, is the reason why exhaustive study has been given to the subject of temperature control. For nearly 40 years the Bristol Co. has been designing and building instruments for automatically recording temperatures, and as a progressive step in line with this, for many years has been making complete temperature control equipment applied to oil, gas and electrically heated ovens, furnaces, etc. Thousands of these have been installed under a great variety of conditions and proved to be very satisfactory, the Bristol Co. states.

Griffith Installs Roll Grinder

Installation of a new roll grinder and other equipment at the Griffith Rubber Mills, Portland, last month enables the company to take care of all Northwest paper mill roll coverings and recoverings. The new grinder, representing an investment of \$12,000, is the only one of its kind installed in any rubber mill west of Chicago, according to Charles R. Griffith. It will grind a straight face or crown on any roll up to 176 inches, face diameter.

Prior to installation of the new unit, Northwest paper mills were doing their own roll grinding, Mr. Griffith said. He pointed out that some of the smaller mills do not have grinding facilities and that it was necessary to transport heavy rolls at considerable cost from one mill to the other for grinding.

The Griffith mills have ample room for expansion, and plan installation of more equipment as business growth justifies.

In Charge of Cloquet Improvements

Jacobson Engineering Co., pulp and paper mill engineers of Minneapolis, Minnesota, is in charge of extensive improvements at The Northwest Paper Co., Cloquet, Minnesota.

Allis-Chalmers Joins Up

The Allis-Chalmers Manufacturing Co., Milwaukee, Wisconsin, has just been elected to membership in the Supply and Equipment Section of the American Paper & Pulp Association.

Link-Belt Elects Watson Vice-President

Link-Belt Co. announces that James S. Watson has been elected vice-president, with headquarters at the company's Dodge Works in Indianapolis, Ind. Mr. Watson has been with the company continuously for 34 years, having entered the employ of its Philadelphia plant when he was barely out of his "teens."

Places Largest Chain Order

The Webster-Brinkley Co., of Seattle, is now making delivery of the largest sawmill chain order ever placed at one time in the history of the Pacific Coast industry for use in the new mills of the Weyerhaeuser Timber Co. at Longview, Wash. The order included the Webster Malleable Chain and a large quantity of the Wilmot Engineering Company's Keystone Rivetless Chain. The greater part of this Keystone Rivetless Chain will be employed on the log hauls. While this chain has been used for many years in anthracite coal regions of Pennsylvania and in assembly plants of automobile manufacturers, the application to the sawmill industry is new as heretofore the round link wrought iron chain has been used almost exclusively.

Ross and Waldron in New New York Offices

After April 22, the executive offices of the J. O. Ross Engineering Corp., and the New York office of the John Waldron Corp. will be located in the new Chanin building, 122 East 42nd St., New York City.

The J. O. Ross Engineering Corp. are specialists in heating, ventilating and drying equipment for paper and pulp mills exclusively.

The John Waldron Corp., a century old organization of machine builders and pioneer in the building of machines for paper converting, also maintains an office in the new Chanin building.

The main office of the John Waldron Corp. is located at New Brunswick, N. J. Both Ross and Waldron also maintain branch offices at 208 West Washington St., Chicago, Illinois and 519 American Bank Building, Portland, Oregon.

Northwest Lead Hoopsters Are Champs

The Northwest Lead Company's basketball team won the Seattle Commercial League, Class "C" championship for the 1928-29 season. These boys went through the entire season in their class without losing a single game. The Northwest Lead has supplied many tons of lead for acid lines and other purposes in Pacific Northwest pulp and paper mills.

New Feature of Spiral Drive

Several features are listed for the Black-Clawson Spiral Bevel Gear Drive. Among the advantages are a double shell one-piece base which provides a rigid foundation and goes far to eliminate vibration. The base casting is also used as an old reservoir which, by use of a splash system, provides lubrication.

Spiral bevel gears of nickel steel or iron provide an almost exact rolling motion with little friction and with vibration freedom. All revolving parts are tested for balance on a dynamic balancing machine.

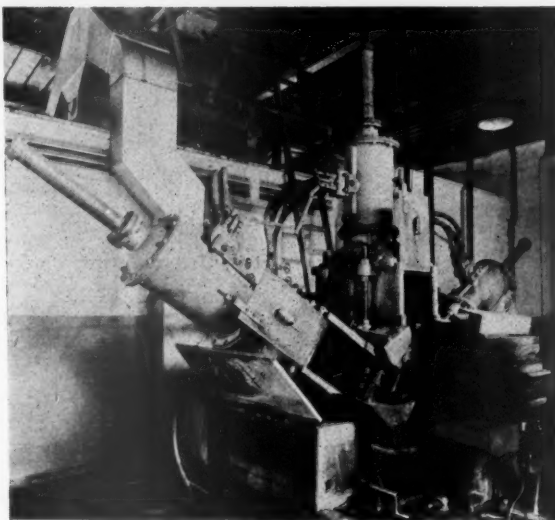
New Type Pulp Grinder

The Sandy Hill Iron & Brass Co. has recently developed a new type of pulp grinder. The main feature of this machine is that its production runs nearly as high as a magazine type grinder and at the same time its cost is very much lower. The pockets are very much larger than the conventional type and there are many refinements and improvements in design.

The Kimberly-Clark Mills at Kimberly, Wis., had a battery of these grinders built for their plant and advised the manufacturer that they are getting a production on each grinder of 16½ tons per 24 hours at five-sixths of the load. They have done as much as 21 tons of groundwood pulp per grinder per 24 hours, full load.

Based on the remarkable results of the Kimberly-Clark mills, the Longview Fibre Co. at Longview, Wash., has recently installed two of these Sandy Hill high production grinders in their new mill at Longview.

A. H. Cox & Co., Seattle, represents the Sandy Hill new type grinder on the Pacific Coast.



New type Sandy Hill Iron & Brass Co. Grinder recently installed in new groundwood mill of Longview Fibre Co.

Cost Production; Cameron Booklet

A booklet entitled "How Good Rolls of Paper and Paperboard Can Be Made at the Least Expense", written by James A. Cameron, president of the Cameron Machine Co., has just been issued by the company.

Mr. Cameron stresses the importance of cutting and producing perfect paper and paper rolls and shows how this significant factor in production can be attained at minimum expense and inconvenience. The booklet is profuse with suggestions on better methods of slitting and winding.

Thomas Warner Visits Everett

Thomas Warner of Oregon City, veteran Coast paper maker who has been with the Crown Willamette Paper Co. for nearly fifty years and who invented the "Warner Equalizer" for which manufacturing rights were sold to the Smith & Valley Iron Works, Portland, was in Everett, Wash., at the beginning of the month with an official of the Smith & Valley concern. The purpose of the visit was an inspection of equalizers of the Warner type which have been installed by the Everett Pulp & Paper Co.

Hawley's No. 2 Machine Gets Overhaul

Number 2 paper machine at Hawley Pulp & Paper Co. was shut down at the beginning of the month, for an extensive overhaul similar to treatment given No. 3 paper machine in February. The work is being done by the regular mill repair crew.

Blanchard Gives a Talk

S. W. Blanchard, assistant manager at the West Linn mill of the Crown Willamette Paper Co., spoke to an assembly of students of West Linn high school on March 25, on the "Application of a College Education."

New Hercules Jordan Agency

Gibbs-Brower Co., Inc., recently took over the eastern territory of the United States for the Hermann Manufacturing Co. of Lancaster, Ohio, manufacturers of the Chaffin refining engine and the new "Hercules" Jordan.

The new "Hercules" Jordans, which have been on the

market for less than a year have been installed in many of the paper mills in the middle west and in several Canadian mills and are said to be giving a most satisfactory account of themselves.

Pacific Coast sales are handled through A. H. Cox & Co., Inc., Seattle.

Texas Sulphur Moves Offices

Texas Gulf Sulphur Company announce the removal of their general offices to the thirty-first floor of the New York Central Building, 75 East Forty-fifth St., New York City.

New Rubber Roll Covering Plant at Seattle

H. C. Dodge, recently from Oakland, California, where he was associated with the American Rubber Co., began operations this month in a new rubber roll covering plant at Seattle known as the Cascade Rubber Co. Recovering of rubber covered rolls such as used in pulp and paper mills will be the principal work at present, according to Mr. Dodge, but the company may branch out into other lines later. The Seattle location is deemed to be centrally located so as to serve at good advantage the mills of the Pacific Coast states and British Columbia.

They Entertain

The women of the Headquarters Camp Club, composed of wives of men employed at the main camp of the Crown Willamette Paper Co. near Cathlamet, on March 16 were hostesses in Cathlamet, at the Odd Fellows hall to a garden ball. The affair was one of the society functions of the season in Wahkiakum county.

Joseph A. Colton has left the Zellerbach Paper Co., to become city salesman for the Rhine Optical Co., San Francisco. Mr. Colton is a son of Louis A. Colton, director of purchases of the Zellerbach Paper Co.

R. C. Bishop has severed his connection as western representative of the Whiting Paper Co. of Chicago and Holyoke, Mass.

Hammermill Executives Tour Coast

Harrison R. Baldwin, manager of sales for the Hammermill Paper Co., Erie, Pennsylvania, and J. F. Wuenschel, manager of the Pacific sales office of the Hammermill company and of the Grays Harbor Pulp & Paper Co., Hoquiam, Wash., are making a tour of the Pacific Coast cities. Mr. Baldwin is accompanied by his wife, and Mr. Wuenschel by his wife and son. The party arrived in Los Angeles on March 27, going from Los Angeles to San Francisco, several days following were spent visiting points of interest in Southern California, which held particular interest for all of the party, except Mr. Baldwin, as it was their first visit to the land of winter sunshine and flowers. Mr. Baldwin is an annual visitor to the Pacific Coast, and so has had an opportunity to enjoy its attractions on previous trips.

During the three weeks that the party will spend on this coast, in addition to California cities, Portland, Seattle, Tacoma and Hoquiam, Washington, will be visited. The latter point is the location of the new paper mill in which the Grays Harbor Pulp Co. and the Hammermill Paper Co. merged interests in a joint enterprise known as the Grays Harbor Pulp & Paper Co. Mr. Wuenschel will inspect the mill site, preparatory to locating permanently on this coast later in the year. Mr. Wuenschel formerly was territorial representative for the Hammermill company in the middle west. G. W. McCormack and E. T. O'Conner have been made territory representatives for the company in the middle west, an extra territory having been created, Mr. Baldwin states.

Mr. Baldwin says that the Hammermill mills have been operating at full capacity for several years, which is the reason for branching out in a manufacturing way on the Pacific Coast, and that it is expected to have the mill in operation by July 1.

"We expect to make some very good paper in the new mill," added Mr. Baldwin.

Mr. Baldwin states that business conditions in general throughout the paper business in the United States are good, and that in his opinion about the same conditions exist on the Pacific Coast as prevail in the East in this regard. He says that there is a constantly increasing sale of his company's products on this coast, which he thinks is due to the fact that the company has progressive local sales organizations as representatives.

Donald S. Leslie, Mr. Baldwin says, recently was made assistant sales manager for the Hammermill organization. Mr. Leslie is the son of John Leslie of the Leslie Paper Co., Minneapolis.

Increase in Finnish Paper Production and Exports

Last year's output of the various classes of paper in Finland showed an increase of around 23,000 metric tons over that of 1927, the total for 1928 reaching approximately 305,000 tons, according to the Department of Commerce.

Exports during the year comprised 133,926 tons by the Finnish Paper Mills' Association, 46,573 tons by the Finnish Paper Bureau, and 66,949 tons by the Kymmene Aktiebolag, a total of 239,758 tons as against 228,462 tons in 1927.

Shipments of paper were distributed as follows: the United Kingdom 87,297 tons, Russia 46,323 tons, North America 41,246 tons, South America 24,061 tons, China 7,868 tons, British India 1,834 tons, Japan 93 tons, and Australia 66 tons. The remainder went chiefly to various European countries.

Study Everett Mill Waste Supply

Richard Reinertsen, city of Everett commissioner of public works; Carl F. Klapp, water superintendent, and John Cunningham of the Portland firm of Baar and Cunningham, water engineers, visited the Lowell plant of the Everett Pulp and Paper Company March 21. They were shown the entire process of paper making, from pulp to book paper by A. H. B. Jordan, vice-president of the company.

The visitors are vitally concerned with the proposed bond election to raise \$2,000,000 with which to bring additional water for industrial purposes from the Sultan River to Everett. Hence they were particularly interested in the filtration system by which the company gets much of its water from the Snohomish River. The Baar & Cunningham report on water sources to the city council suggests the added pipeline to the Sultan River.

Interest in water by the city council is primarily due to the need for an additional supply for a \$3,000,000 pulp plant already announced and possibly for others that are reported to be negotiating for water promises from the city.

Oregon Passes Reforestation Law

According to the provisions of the reforestation act passed by the Oregon legislature last month, all cut-over or burned-over timber land is to be classified as to its value for various purposes. Lands which are of no value except for timber purposes will be so classified and placed upon a separate roll for taxation purposes, paying a fee of five cents per acre per year in lieu of all other taxes until the timber is ready to be cut, when the state will collect a yield tax of 12½%.

In classifying these lands of which there are more than two million acres in Oregon, it will be necessary to conduct public hearing at which all of the facts concerning the lands will be given consideration.

These facts, together with the findings of the forester in charge of the hearings, will be submitted to the state tax commission for final determination as to the classification of the land.

Grays Harbor Pulp to Japan

One of the largest Oriental shipments of pulp from the plant of the Grays Harbor Pulp & Paper Co. at Hoquiam, Wash., was carried late last month aboard a Japanese motorship. The pulp was consigned to Kobe for manufacture into paper. The ship has been a regular caller on the Harbor in the lumber trade and like many trans-Pacific and intercoastal freighters has entered the pulp carrying trade from Grays Harbor with the start of production last winter by the pulp mill.

Named Deputy Assessor

F. A. Shannon, formerly with the Northwestern Pulp & Paper Co., Astoria, has been appointed deputy county assessor for Clatsop County, Oregon, and will be engaged in special studies of logged off lands. He will check up on logged off land with second growth timber in order to have the results ready when the survey of the county starts under the new Robison state reforestation law.

How's Business?

*"The Paper Industry Reflects
the General Prosperity"*

*Thumbnail Sketches of the Pacific Coast's Principal
Resources and How They Are Faring*

Cement—A Potential Paper Market

Concrete has become the most universal of building materials. Every year new uses for it are found, both structural and ornamental. Thus the manufacture of cement is a rapidly growing Coast industry.

During 1928, Coast mills produced a total of 20,391,000 barrels of cement. Of this total 13,704,000 barrels were manufactured in California, 3,943,000 barrels in Oregon and Washington and 2,744,000 barrels in Colorado, Montana and Utah. With a number of new plants going into production during 1929, among these the new Seattle plant of the Pacific Coast Cement Co., the total for 1929 should be considerably more than 1928.

Just how important the cement industry is can be easily seen when it is realized that cement production in the United States has increased over 100,000,000 barrels since 1910. In that year 76,549,951 barrels were produced; in 1928 production was estimated at 177,000,000 barrels. Approximately 12 per cent of this total is from Coast mills. Concrete building is becoming yearly more popular. Stucco homes, concrete highways, concrete floors in pleasing color schemes and designs, air port runways and taxi-strips, office and factory buildings of concrete construction are only a few of the many uses to which cement is being put.

Construction Increasing

Construction figures for the United States indicate that additional volume each year is the normal thing. Population increases at the rate of 15 per cent in a ten year period. This means that during the next ten years factories, homes, apartments and highways must be constructed to accommodate 18,000,000 more people than we have today. An authority declares that the United States rebuilds itself every 11 years, which means that during the next 11 years construction for the past 11 years will be duplicated, with additional construction to accommodate population increases.

Besides being a thriving industry cement also represents a market of vast potentiality for manufacturers of paper bags. Since paper bags for the shipment of cement and plaster were introduced five years ago, the change to this new type of container has been rapid,

and at the present time hundreds of millions of paper bags are used yearly in the cement industry. On the Pacific Coast approximately one-twelfth of the nation's cement is manufactured yet very few Coast shipments are made in paper bags. A recent table compiled by the Bates Valve Bag Corp. shows that, while in eastern states about 35 per cent of the shipments are made in paper, this method is adopted for but 14 per cent of the California shipments, 9 per cent of the Washington and Oregon shipments and 19 per cent of the Colorado, Montana and Utah shipments.

Darwin Meisnest, sales manager of the new Pacific Coast Cement Co. plant at Seattle, a firm believer in the advantages of shipping cement in paper, points out that the 21,391,000 barrels, Coast production for 1928, equals 85,564,000 sacks. With paper sacks costing five cents each and the Coast maintaining the 35 per cent Eastern average for cement shipped in paper the annual gross sales of paper bags to the cement industry would equal \$1,497,370. Here is a real market for kraft paper.

The Pacific Coast Cement Co. has adopted the multi-wall paper bag for virtually all sack shipments. Each bag holds 94 pounds of cement and since the cement does not adhere to the walls each bag delivers its full contents to the mixer.

Cement manufacturers, contractors and dealers are rapidly appreciating the benefits derived from paper sacking. Rain and snow does not upset building schedules because paper bags can be delivered for open storage in wet weather. Dealers are expressing preference for handling cement in paper for warehouse business. Contractors are learning that in the final analysis paper shipment is just as economical and far more satisfactory than cloth, despite cloth bag rebates allowed for return of empties. Overhead in handling the empty cloth bags often exceeds the rebate.

Samuel Dauman Visits Pacific Northwest

Scattered among the pulp and paper mills of the Pacific Coast, Samuel Dauman of the M. Gottesman & Co., New York pulp brokers, found many friends whom he had known when they were connected with one or another of the mills in the Atlantic or Middle West states in past years. Mr. Dauman made a general tour of the Coast in March and early April, visiting with a number of executives and personally inspecting some of the newer mills. He came as far north as Seattle and returned via California and from there went East to visit some of the mills in Louisiana and other Southern states. Mr. Dauman has been in the pulp selling field for many years.



Modern cement plants are big affairs. Here is the recently completed Seattle unit of the Pacific Coast Cement Co.

The Paper Market In Australia and New Zealand

An Interview With
JULIAN B. FOSTER

American Trade Commissioner, Wellington, New Zealand

Often during the past decade it has been prophesied that the bulk of the world's commerce will, in the not too distant future, be centered in the countries bordering the Pacific Ocean. Australia and New Zealand, lands endowed with vast potentiality for the development of natural resources, blessed with a temperate climate and possessing hundreds of thousands of acres of undeveloped and even unexplored land judged suitable for agriculture, hold an enviable position in this new "Era of the Pacific."

The past few years have witnessed considerable increase in exports of paper to Australia and New Zealand, especially New Zealand, from Pacific Coast United States custom districts and from British Columbia ports. This fact has caused exporters of paper and paper products to look toward these two east Pacific countries with the intent of developing the market there. For that reason the opinions on the paper trade situation there expressed by Julian B. Foster, American Trade Commissioner, with district headquarters in Wellington, New Zealand, should hold considerable interest to the Coast paper trade.

Knows Australian Situation

Mr. Foster, who before being appointed to the post in New Zealand was for two years stationed in Australia, knows the trade situation in Australia and New Zealand better, perhaps, than any other American in touch with the two countries. During a short stay in Seattle early in April, Mr. Foster gave PACIFIC PULP AND PAPER INDUSTRY some interesting and startling facts regarding the future development of the paper market as far as the Pacific States and British Columbia are concerned.

While Mr. Foster feels that the paper imports from the Coast countries will increase, he does not feel that that increase will be in any proportion to the increased consumption that is bound to accompany the development of the Australasian nations.

Mr. Foster declares, "There are several local and quite active advertising agencies. They are developing the field and uses for printed ink, etc. This is gradually coming on. Booklets are largely used and well liked. There has lately been a marked or distinct trend toward package goods. This market is experiencing steady and rapid growth. However, conditions over there do not move very fast in the paper trade, and there is not likely to be any distinct change for the next 18 months.

Home Manufacturing Increasing

"Australia, however, is now manufacturing its own paper more and more, and this home manufacture will increase just as home demand increases. In the meantime, New Zealand is establishing a paper manufacturing industry and a privately owned mill in the South Island at Christ's Church will be in operation in about 18 months. Altho the cost of manufacture is extremely high in this latter section, nevertheless the effect will probably be felt on the American and British Columbia export market."

British Columbia exports to Australia and New Zealand are, of course, considerably greater than the exports from the other sections of the Pacific Coast; this is due to the British policy of trade within the empire and advantage gained by preferential tariff.

Altho, in comparison with the other Oriental markets,

Pacific Coast exporters feel that Australia and New Zealand have been fairly well developed and are yielding an accountable return, Mr. Foster declares that in comparison to the volume of business transacted in the two countries the Coast contribution is small.

"The Pacific Coast at the present time," Mr. Foster states, "does not have much business over there. But what they do have is good business, and they will hold it—as well as increase it. It is bound to increase."

From some angles the picture that Mr. Foster paints of the future for the Pacific Coast paper trade in his territory is not bright; from other angles it is encouraging. He shows that the market is no easy one to develop and at the same time indicates that the market is there if properly promoted.

Swedish Pulp and Paper Market Steady

The year 1928 closed with a feeling of general confidence in the Swedish pulp and paper industry, notwithstanding a number of adverse factors with which the manufacturers had to contend, according to the Department of Commerce.

Production—and, consequently, exports—were reduced somewhat by the labor troubles in the early months of the year, but these losses were made up to a great extent after the mills resumed operations. Exports of mechanically ground wood, amounting to 278,218 metric tons (metric ton equals 2,205 pounds), were actually 7% above those of the previous year, and of boards amounting to 36,598 tons, 12% above 1927.

Exports of chemical pulp, however, decreased—sulphite by 17% and sulphate by 4%. Paper shipments also were lower, newsprint having decreased from 171,726 tons to 159,878 tons and other classes of paper from 211,773 tons to 205,226 tons.

Soviet Expansion of Paper Industry Continues

The changing industrial life of Russia (U. S. S. R.) is creating an increased demand for paper. That the Soviets are expanding that branch to meet this demand is indicated in data taken from the "Economic Review of the Soviet Union," of March 15, 1929, shown below:

Paper Industry

Construction of cellulose plant at Archangel, to work in combination with saw mills now operating in the region; annual production about 83,000 tons of cellulose.

Cellulose and wood pulp factory in the Vytchegodsk region; annual production about 100,000 tons of cellulose, 34,000 tons of pulpwood and 30,000 to 36,000 standards of sawn timber.

A similar enterprise near the Mezen River region; production of the combine to be about 50,000 to 60,000 tons of cellulose and from 24,000 to 30,000 standards of sawn timber annually.

Colombian Government Wants Paper

The Colombian Government is in the market for newsprint, book and business letter paper, according to a cablegram received from Walter Donnelly, trade commissioner at Bogata.

Manufacturers are requested to send samples and prices to the Paper Division of the Bureau of Foreign and Domestic Commerce, Washington, D. C., for transmittal to Mr. Donnelly.

No information as to quantity desired was sent.

Tacoma Firm Makes Furniture From Paper

The strength of kraft paper has been utilized in the manufacture of many articles which before its introduction were made from materials other than paper. One use of kraft paper that has been little advertised, however, and that has almost unlimited possibilities for progressive development is in the manufacture of fibre furniture.

The Western Fibre Furniture Co., Tacoma, Wash., is the only Northwest firm making fibre furniture from kraft on an extensive scale and as this concern also manufactures upholstered and wood furniture the advantages of fibre as outlined by Fred Schoemaker, president and manager of the company, can be accepted as unbiased.

"Fibre furniture, manufactured from sulphate kraft paper, is undoubtedly stronger, more durable, and more colorful than either upholstered or wood," he declares. "We have tested a 5/36-inch strand of fibre rope with weights up to 200 pounds and a nine-pound fibre chair can be subjected without injury to abuse that would ruin a much heavier piece of wood furniture."

In manufacturing fibre furniture, strips of kraft paper, three to five inches in width, are immersed in glue and then twisted into strands of rope. The strands are hand woven on light frames of hardwood—maple, ash, birch or alder—and the binding of the cord adds additional strength to the frame. The finished piece is given a bath in glue and painted in various color combinations.

According to Mr. Schoemaker, fibre furniture has been subject to an unfair prejudice because the buying public, long familiar with the weaknesses of reed furniture, fail to differentiate between that and fibre, the latter possessing great durability and strength.

Because of the strength of the binding, the frame material need not be more than one-half to one inch

in thickness and so various effects can be achieved through bends. This, coupled with the numerous patterns that can be worked out in weaving and the unusual color effects possible, enables the creation of



Twisting Kraft Paper Into Cords for Furniture

unique and interesting pieces of furniture. In their large sample room the Western Fibre Furniture Co. has on display all kinds of fibre furniture, ranging from floor lamps, smoking stands and ferneries to davenport and library tables.

The company uses monthly two tons of kraft paper, manufactured by the Crown-Willamette mill at Camas, Wash.

The officers of the Western Fibre Furniture Co. are Fred Schoemaker, president and manager; Edwin Gregory, vice-president and treasurer; Floyd W. Smith, secretary and sales manager; John S. Baker and H. Arthur Rust, trustees.

Samuel Connell Passes

Samuel Connell, 64, treasurer of the Northwest Pulp & Paper Co., Portland, died in that city March 7. Mr. Connell, a native of Canada, came to Portland at the age of nine. Early in life he became interested in the sash and door industry, and for a time was owner of a local door company. In the fall of 1926, he, with a group of Portland and Astoria men, organized the Northwestern Pulp & Paper Co. He maintained the company's office in the Porter Building until the time of his death.

Whether Mr. Connell's death would cause a further setback in plans for construction of the proposed mill at Astoria was unknown as this was written. A meeting of the directorate was scheduled for some time this month, at which time the matter was to receive consideration. It was thought that Walter Graves, company auditor, would be named to succeed Mr. Connell as treasurer.

Wertheimer Back On the Job

R. S. Wertheimer, resident manager of the Longview Fibre Co.'s plant at Longview, is back on the job again, after being in the hospital two weeks. On March 8 Mr. Wertheimer was taken suddenly ill, and that night underwent an emergency operation for appendicitis at the Longview Memorial hospital. Two weeks in the hospital, and another week convalescing at his home, and he was able to resume his work.



FRED SCHOEMAKER

A Little Mill

Doing a Big Business

The Sidney Roofing & Paper Co. declined to follow advice and chose to lead with ingenuity.

A MILL that is probably unique on the Pacific Coast is that of the Sidney Roofing & Paper Co. at Victoria, managed by R. W. "Bob" Mayhew, who smilingly ignored his friends some 15 years ago when they told him "it couldn't be done."

The thing that was impossible to Bob Mayhew's advisors was the establishment of a patent roofing factory in Western Canada that would pay for itself in the face of competition from the East. To those who doubted the probable success of his venture Mr. Mayhew used to reply, "Well, there's a market here, isn't there? If I can put out a product that is as good as the imported article and can sell it at the same if not a lower price, haven't I got a chance?"

When he talked about markets Mr. Mayhew was casting his vision beyond the confines of the domestic sales territory. At that time the idea of selling patent roofing in Japan, for instance, seemed little more than a figment of an unreasonably optimistic imagination. But subsequent events have proved that while Mr. Mayhew was unquestionably an optimist he was also the possessor of sufficient business judgment and aggressive spirit to make his dream come true. Today, Mr. Mayhew is not only selling patent roofing in the Orient but he is also selling a steadily increasing volume of paper board, box board, wall board and a multitude of other varieties of pulp products, not only to Far Eastern countries, but to New Zealand and Australia, as well as to British Columbia manufacturers, contractors and private buyers. He is also extending his field further east and finds the Canadian prairies a lucrative field.

When, in 1914, Mr. Mayhew established himself in the roofing business in a small way he invested \$40,000 in a factory at Sidney, a little industrial community about twenty miles north of Victoria. Today, Mr. Mayhew estimates that his plant represents the investment of some \$600,000. The progress of the Sidney Roofing & Paper Co. has been consistent and steady, with improvements and additions being made at regular intervals to meet the growing demands of the trade. As an illustration of these growing demands the company's expansion program carried out during the past year represents an expenditure of close to \$200,000.

Remodeling of the paper machines cost \$90,000. Two cylinders were added to convert the plant into a board mill, and this change resulted in the increasing of the plant's capacity from 15 tons to 25 tons daily. A Beloit cylinder machine with a capacity of eight tons daily was also installed, at a cost of \$40,000, to handle roofing felt. Another new unit was a groundwood pulp mill capable of milling 10 tons daily, at a cost of \$48,000. The company also decided to go into the asphalt shingle trade and installed a cutting machine

Not a big mill, this one of "Bob" Mayhew's at Victoria, B. C., but there's a story here of persistency and ingenuity that's worth the notice of many a bigger fellow. After all, success lies in making the most of the opportunities 'round about you, and not in sighing vainly over what looks to be greener grass in more distant pastures.

which, with the bunkers, cost \$15,000 installed.

That does not cover the full story of the company's construction program. Warehouse space has been increased in the factory to the extent of 15,000 square feet and recently carpenters, plumbers and concrete gangs constructed modern dressing and locker rooms for the employees.

Paper board and patent roofing may seem an odd combination,

but Mr. Mayhew has found it satisfactory. "The trend of this business in the future if our success is to be maintained lies in our ability to diversify," said Mr. Mayhew. "That, to my mind, is the key to success in the box industry. There is no such thing as market saturation so long as we can find new uses for pulp products and diversify our output accordingly."

Mr. Mayhew doesn't preach one thing and practice another. The Sidney Roofing & Paper Co. is marketing 20 different kinds of articles at present and there are 70 different items on its price list.

Mr. Mayhew solved the problem of raw materials long ago. He established himself as the biggest buyer of rags, cast-off clothing, books, papers and other pulpable junk in Victoria. It was all grist for his mill, and to it he added wood pulp. In the early days he had to buy this pulp, but that did not appeal to Mr. Mayhew's idea of economical production. He wanted to extend his manufacturing process right back to the handling of materials in their crudest form, and this resulted in the establishment of his groundwood mill. He buys his spruce, balsam and hemlock direct from hand loggers and farmers now. One of these days he may establish his own logging camp so as to hew costs of production a little finer. He will be forced to take this step before long, for his sales of woodpulp are mounting steadily.

Four years of operation at Sidney convinced Mr. Mayhew that it would be a wise move to get closer to the source of raw materials and to ocean terminals, so in 1918 he transferred his entire plant to Victoria. The post-war depression followed this change, but strangely enough it failed to disturb the development of Sidney Roofing & Paper Co. Mr. Mayhew foresaw the possibilities of an industry providing locally a good product that hitherto had been imported, and such a convincing story did he tell the provincial government that he succeeded in obtaining a loan of \$100,000 from the provincial government to finance the improvements to the plant which he knew were necessary. Every payment of principal and interest was promptly wiped off and today the provincial government still refers to the Sidney Roofing & Paper Co. as a conspicuous case where subsidized industry made good.

Mr. Mayhew has been fortunate in the loyalty and ability of his subordinates. His superintendent is Fred R. Sievers, who was with the Zellerbach mills for sev-

eral years before being appointed as head of research work for the Pacific Mills, Ltd. Mr. Sievers is the sort of technical executive who spends more time in overalls than at a desk and almost every hour of the day he is in the plant, as close as possible to the job. When a representative of PACIFIC PULP & PAPER INDUSTRY visited the mill recently he found the superintendent of Sidney Roofing & Paper Co. hidden by a cloud of steam while he labored on top of some felt cylinders, plugging a leak in a funnel. It was just one of those little repair jobs that occur unexpectedly around a plant and which requires more plain horse sense than technical knowledge to adjust. It is these little jobs that are not to be dealt with by prescribed pattern but by individual ingenuity that Mr. Sievers delights in doing. But he likes the bigger problems, too, and is recognized as one of the ablest all-round mechanical experts engaged in the pulp and board industry in the Northwest.

But Mr. Mayhew has always been the dominant figure in Sidney Roofing & Paper Co. Indeed, the concern was for years known as "Bob Mayhew's company" as familiarly as by its registered name. Victoria thinks a lot of Mr. Mayhew and he has held important offices in the chamber of commerce and service clubs. His capacity for hard work and far-sighted planning are matched by his modesty, however, and he treats only half seriously the statements of his friends that the success of Sidney Roofing & Paper Co. has been rather phenomenal. "I simply saw a market and I'm selling it" is the way he puts it, and that, after all, is as good an explanation as any for the progress of his company.

Rice Straw Paper Mill Delayed

A contract for construction of the rice straw mill for the Pacific Coast Pulp & Paper Corporation at Richville, California, had not been let as this was written. P. Swan, Portland, who recently completed plans and specifications for the new project, stated that the delay was due to some technicality in the stock certificates. He added that the error had been corrected and that new certificates were being printed. Before returning to Sacramento early this month for a conference with C. A. Kieren, who is to supervise construction, Mr. Swan stated that no further delay in awarding the contract was anticipated. Financing is completed and the necessary money for going ahead is available, he said.

Youngman O. K. Again

Frank N. Youngman, vice-president of the Canadian Crown Willamette Company, Vancouver, B. C., has recovered his health and is now back at his desk again after more than a month in the hospital. A severe cold contracted while in California attending a conference of Crown Willamette executives made an operation necessary.

International Advances Kraft Prices \$10 a Ton

International Paper Co. advanced the price of kraft paper in March from \$75 a ton to \$85 a ton, an increase of \$10 a ton. The company has a capacity of 225,000 tons of kraft paper a year and is the largest manufacturer of this grade of paper in the world. Prospects of another \$5 a ton boost on about April 15 are indicated.

Lawrence W. Killam, president of the B. C. Pulp & Paper Company, is visiting Montreal and other eastern cities on a business trip.

Swedish Pulp Men Investigate Pacific Coast

That development of the pulp and paper industry of the Pacific Coast has attracted attention as far away as Sweden is evidenced in the tour made by several pulp and paper men from that country, on the Coast recently. The men investigated a number of the Coast mills and looked into methods of pulp and paper manufacture, both sulphite and sulphate, as well as lumber and logging operations.

Mr. Alan C. Dunham, Portland, Pacific Coast representative for several wire and felt manufacturers, who accompanied the gentlemen from Sweden on a tour of the Coast mills, writes the following letter to PACIFIC PULP AND PAPER INDUSTRY:

I have just had the pleasure of being with a party of gentlemen from Sweden, taking them to various mills and lumber operations on the Pacific Coast. These gentlemen, as you will note, are all connected with the lumber and pulp industries of Sweden, and they are making an extensive study of conditions on this continent.

Mr. Torsten R. Hernod is the president of the Munksund Company of Lulea, Sweden. Mr. Birger Sundfeldt is chief engineer of the Munksund Company. Mr. Gusta Diedrichs is of the firm of Ostberg & Diedrichs of Stockholm, and Mr. Ragnar Lagergren of Mouch Domsjo A. Bol. of Stockholm.

Through the medium of your paper, they are desirous of thanking and expressing their appreciation to the various officials and gentlemen they met, who extended the courtesy as visitors to them.

Mr. Hernod and Mr. Lagergren requested me to ask you to please include them in the list of subscribers for the PACIFIC PULP and PAPER INDUSTRY, sending the paper to the addresses I have given you above, as they are most desirous of keeping in touch with Pacific Coast developments through your trade paper.

Mr. R. D. Kehoe of the Technical Economist Corporation accompanied the party from New York and the tour was made more or less under his supervision.

I know that this will be an item of news for your publication and I am sure that you will give them a nice little write-up in the copy of the issue which will be sent to Sweden.

Very truly yours,

A. C. DUNHAM.

Hawley Skips Dividend

The Hawley Pulp & Paper Co. of Oregon City announced last month that dividend payments on the first preferred stock, due April 1, would be deferred. Due to the unfavorable condition existing in the news print field and decreasing sales in this line, company officials took this step in order not to weaken their current financial position. Severe decline in the news print market is attributed as a principal cause of Hawley's 1928 operations.

A Hollywood Romance

A romance that began in the motion picture studios of Hollywood culminated in Seattle, March 16, when John Phillips Lowney, a Northwest official of Zellerbach Paper Co., married Ann McDermott, Hollywood scenario writer and a sister of Frank McDermott, author and motion picture director.

H. L. Zellerbach, president of the Zellerbach Paper Co., was a Seattle visitor April 6 and 7, spending two days before leaving on an inspection tour of the Zellerbach Northwest mills. After leaving the Sound region Mr. Zellerbach visited Spokane before returning to the South.

THE FOREIGN MARKET

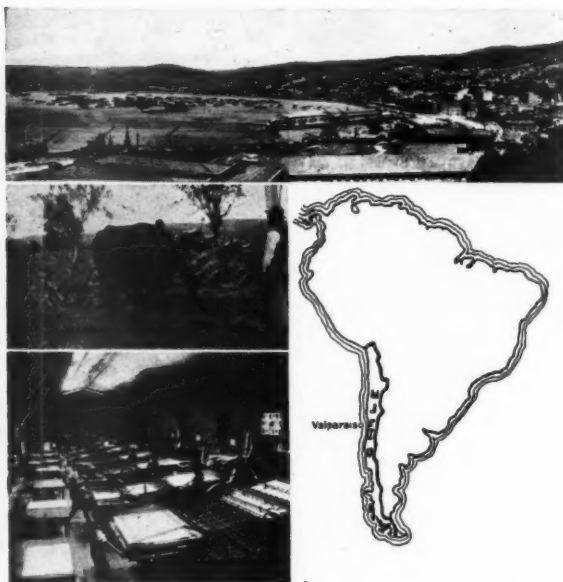
Chile—A Market for West Coast Paper Products

Written Especially for PACIFIC PULP & PAPER INDUSTRY

By NORMAN S. MEESE, Assistant Chief, Paper Division
United States Bureau of Foreign and Domestic Commerce

If Chile were on the Pacific Coast of North America it would occupy a strip of land, from 90 to 130 miles wide, stretching from Lower California to Juneau Alaska. Chile has 2,500 miles of sea coast, a temperature ranging from frigid zone to torrid, and is cut off from the rest of the world by the Pacific Ocean on one side and the lofty Andes range on the other.

Its extreme latitudinal area makes it necessary to di-



Chile is the most important market on the Western side of South America and ranks third among all Latin-American nations. Above is a panorama of Valparaíso, seaport. The two smaller views afford a contrast of the new and old (top) a Chilean farmer and his ox team (below) the press room of Zig-Zag, a Santiago publication. Incidentally, the presses were manufactured in the United States.

vide it roughly into three physical parts, the characteristics of each of which effect its commerce to a great extent. The northernmost is the arid nitrate zone extending from the Peruvian border to about Coquimbo; the central is an agricultural zone of plains and valleys on the sea coast of which are Chile's most important cities; and the southernmost is a heavily wooded area with many archipelagoes and practically uninhabited by whites. The population is slightly in excess of 4,000,000, the great majority of whom are of European origin. The principal industries are mining and agriculture, manufacturing being but little developed.

While the consumption of paper of all kinds in Chile is not so great as in the East Coast countries, it is the most important market on the western side of the Continent and ranks as the third largest consumer in South America. There is a considerable printing industry and there are about 650 newspapers and periodicals published in the country. During 1927 nearly 30,000 short tons of paper were imported at a value of almost

\$2,500,000, the major portion of which was newsprint followed by smaller quantities of wall paper, tarred roofings, coated and uncoated book, boards of all kinds, and miscellaneous varieties. Imports from U. S. in 1927 totaled \$207,351.

The Scandinavian countries and Germany have for many years been firmly established in the Chilean paper import trade. Practically all of the better grades of paper used in the country have been imported as the native production is limited very largely to wrappings and board. The papers in greatest demand in Chile are those classed as printings, of which newsprint is the largest. The newsprint in most common use is in rolls 160, 120, and 80 centimeters in width and weighs 50 grams to the square meter. Most of the merchandise for Chilean ports is landed from open lighters and is often left exposed on the moles, hence roll news should be barrel packed. Sheet news should be packed in compressed bales with waterproof wrapping and solid board top and bottom. American newsprint mills could undoubtedly obtain a large part of this business if they could meet the Chilean packing requirements at a reasonable additional cost. Nearly all of this trade has, however, been going to Germany, Norway, and Sweden.

All types of book paper are used but the principal demand is for the cheaper grades containing a proportion of groundwood, most of which is supplied by European mills. Price is the sales factor of most importance and while eggshell and antiques are used in small quantities, the cheaper grades are more popular. All book papers should be hard-sized for writing, since they are used for both purposes.

In the writing paper field the principal demand is for the inexpensive unwatermarked "bonds" with a 10 or 15 per cent groundwood content. The fact that these papers contain some bleached mechanical pulp and are much used for printing permits them to enter the country at a relatively low rate of duty. Water-marked sulphites are not in great demand.

The wrapping paper imported into Chile is small in quantity because newsprint has to a large extent been used for wrapping purposes and at the same time the domestic mills produce a sufficient amount to satisfy a large part of the demand. Only the most inexpensive grades of wrapping paper can be sold in any quantity and sulphites are the most popular. Because of the low price at which this must be marketed, very little kraft and manila are sold and grades with 75 to 80 per cent of groundwood are in greatest demand. Greaseproofs and waterproofs, including waxed paper, are not much used since the sanitary wrapping of foodstuffs is not much practiced.

Germany supplies the larger part of the board imported, including both light and heavy pulp, news, chip, straw, and leather boards, although some grades of these meet with competition from local mills. Bristols and ivories are used in minor quantities and all are imported.

Wall board is becoming increasingly popular, but there is practically no demand for roofing paper, especially in the rainless north.

Tissue and toilet papers are imported mainly from the United States and Germany but only in small quantities, and the market is limited.

Envelopes of various kinds are made in Chile and imports are small, the inexpensive varieties being most in demand. Importation of bags is limited by local production and they are not as commonly used as in the United States. The market for them is relatively

small and this country now supplies a large part of the demand.

The bulk of the wholesale paper trade of the republic is carried on from Santiago and Valparaiso. The important dealers are organized to cover all the important consuming centers from these cities. For new accounts it is customary to offer 60 to 90 days sight and relatively little business is done on any other basis. The bulk of it is done on a contract basis through houses in the cities named. The commercial language is Spanish.

Ocean freight service from the West Coast of this country to Chile can stand improvement. Four lines operate from the northwestern ports to the principal Chilean ports of call.

It should be borne in mind that Chile is a price market and that there is a considerable duty on certain grades of paper imported. In trying to compete with northern European shippers these factors must be given full consideration.

Trade Relations Of Canada And The U. S.

Canada and the United States are closely allied in more than one respect. In trade relations is this particularly true. No country imports more goods from a single market than Canada does from the United States. On the other hand, Canada finds its southern neighbor a most important customer, and, singularly enough, a customer for pulpwood, pulp and newsprint.

Canada is a bit disturbed, however, over the fact that the trade balance between the two nations is really not a balance at all, the Canadian purchases in the United States amounting to much less than one-half of the Canadian exports to the United States. Further, Canada visualizes its raw material or semi-manufactures going south of the boundary to provide jobs for workmen in the United States, the same goods returning to Canada with the benefit of manufacture deprived.

It requires no economist to see that a nation can not forever buy without having an equal opportunity to sell. Therefore the man who is interested in the Canadian market is very much concerned in the ability of Canada to buy. Canada, however, finds the tariff question frequently raising its head. The American manufacturer is prone to ask tariffs to serve his immediate selfish purpose without regard to the economic structure as a whole.

At the recent tariff hearings before Congress in Washington it was revealed that some industries were asking for a "protection" tariff, but when asked to put their hands out in front they experienced the discomfiting dismay of the small boy who displays unmistakable signs of having tampered with the jam pot. In other words it is hard to look the part of poverty and oppression when you are fat and healthy and have a juicy all-day sucker in the form of good earnings statements.

With more pertinent reference to the United States-Canadian relations, in view of the huge market Canada offers the States are interested above all in preserving the buying power of the northern nation. When aiming at a real broad policy it may be found that the shoe will pinch in a few places, but the general benefits will be greater.

The president of the Royal Bank of Canada, Sir Herbert Holt, speaking at the annual meeting of the bank, has pointed out some significant things relating to trade relations between the two American nations. Quoting him we learn:

"In spite of the fact that the present trade relationship between the two countries is disproportionately favorable to the United States, there is active discussion of further tariff increases that seem likely to shut out the few competitive items which Canadians now sell there. It would seem that those who propose such tariff changes fail to realize that checks upon Canadian prosperity automatically check the volume of goods which can be bought from the United States, and that on the other hand continued improvement in Canadian conditions brings corresponding increases in the volume of goods which they can sell us. From this viewpoint it might be considered economic statesmanship for the United States to discover means to increase their purchases from Canada, rather than to consider measures which will constitute new trade barriers.

Policies—Tariff and Foreign

"Moreover, it is not feasible for a country to sever completely foreign policy from tariff policy. Official observers from the United States at the World Economic Conference at Geneva, and influential representatives of the United States Chamber of Commerce at the meeting of the International Chamber of Commerce at Stockholm, expressed disapproval of such measures as would be likely to hinder the flow of international trade. With other nations looking to the United States for assistance, the proposed tariff increases would constitute a severe blow at international economic co-operation and good-will.

"If further handicaps are placed upon the exports of Canada to the United States, it will be imperative for Canadians to seek more favorable trade agreements with other nations and to change the present relationship by the application of measures for their own protection.

"In this connection, I again desire to call attention to the possibility of increased trade with the Orient. The stabilization of government in China is producing a situation which justifies optimism concerning the possibility of increased trade throughout that part of the world. The great need of China is for continued stability and increased buying power. If our Trade Commissioners in that part of the world are far-sighted they will be just as earnest in seeking opportunities for Canadians to purchase goods from the Orient as they are to assist in sales. It is essential that Canadians realize the growing importance of the Pacific in world trade."

Increase In Finnish Pulp and Paper Exports

Exports of pulp and paper from Finland, the former valued at \$19,962,104 and the latter at \$26,969,116 during 1928, both show an increase over shipments of the preceding year, the first by only 4 per cent but the second by nearly 20 per cent. The rise in paper exports is due to increased shipments of newsprint and wrapping paper, other grades as a whole having shown a downward tendency. Exports of both chemical and mechanical pulp registered an increase in volume between 30 and 35 per cent over 1927.

Butler Research Head Visits Western Branches

Norman A. Altmann, head of the technical research department of the Butler Paper Corp. of Chicago, visited three of the large western branches of the company the latter part of March. Offices visited were St. Louis, Kansas City and Denver.

S · A · F · E · T · Y FIRST—LAST and ALWAYS

The Best Safety Device Known Is a Careful Man

Safety Contest on New Basis

Beginning with January, 1929, the pulp and paper mills of Washington revised the method of computing accident experience for the purpose of making mill comparisons in the safety contest which they have conducted. The contest, carried through 1928, stimulated an interest in accident prevention, but it was felt that the method employed in computing standings last year did not take sufficient recognition of accident severity.

In other words, if one man suffered a small burn or some similar minor injury and lost practically no time from his work, his injury was computed in the accident experience table on a basis which did not sufficiently differentiate him, for example, from the man who had suffered a compound leg fracture and was unable to work again for several months.

The 1929 contest puts some emphasis on severity in computing experience, charging off to the mill as much

as 6,000 days lost in case of an accident resulting in death or permanent disability to only 300 days for dismemberment of a single finger. Further, the monthly standings take into consideration the cases which carry over from one month to the next, as, for example, accidents resulting in long hospitalization. All of the mills in the contest started the year with a clean slate and carried over no accidents occurring prior to January 1. Tabulation for the first two months of the year are presented herewith.

Woods Worker Injured

H. E. Taylor, woods worker in the Crown Willamette operation near Cathlamet, was struck in the eye when a line broke. The sharp cable end cut his eyeball just below the pupil. Three stitches were taken in the eyeball. It is believed his eye sight will be saved.

STATEMENT OF ACCIDENT EXPERIENCE—JANUARY, 1929

Company—	Hours Worked	Total Accidents	Frequency Rate	Days Lost	Severity Rate	Standing
Fidalgo Pulp Mfg. Co., Anacortes	21,400	0	0.	0	0.	1
Pacific Straw Paper & Board Co., Longview	16,880	0	0.	0	0.	2
Pacific Coast Paper Mills, Bellingham	2,826	0	0.	0	0.	3
Tumwater Paper Mills, Tumwater	2,095	0	0.	0	0.	4
Inland Empire Paper Co., Millwood	70,200	1	14.24	12	.1709	5
Fibreboard Products, Inc., Port Angeles	54,392	1	18.4	12	.22	6
Longview Fibre Co., Longview	95,804	2	20.9	22	.229	7
Crown Willamette Paper Co., Camas	265,467	6	22.60	22	.082	8
Cascade Paper Co., Tacoma	49,125	2	40.7	50	1.018	9
Everett Pulp & Paper Co., Everett	77,848	4	51.38	52	.6679	10
Washington Pulp & Paper Corp., Port Angeles	106,895	6	56.1	36	.336	11
San Juan Pulp Mfg. Co., Bellingham	33,824	2	59.1	11	.325	12
Rainier Pulp & Paper Co., Shelton	65,077	5	76.8	47	.72	13
National Paper Products Co., Port Townsend	42,755	4	93.5	37	.865	14
Columbia River Paper Mills, Vancouver	70,688	7	99.0	149	2.10	15

STATEMENT OF ACCIDENT EXPERIENCE—FEBRUARY, 1929

Company—	Hours Worked	Total Accidents	Frequency Rate	Days Lost	Severity Rate	Standing
San Juan Pulp Mfg. Co., Bellingham	30,392	0	0.	0	0.	1
Pacific Coast Paper Mills, Bellingham	2,523	0	0.	0	0.	2
Tumwater Paper Mills Co., Tumwater	2,001	0	0.	0	0.	3
Crown Willamette Paper Co., Camas	246,011	3	12.19	371	1.51	4
Everett Pulp & Paper Co., Everett	74,736	2	26.76	84	1.123	5
Washington Pulp & Paper Corp., Port Angeles	91,389	3	32.8	39	.426	6
Fibreboard Products, Inc., Port Angeles	49,696	2	40.2	21	.422	7
Inland Empire Paper Co., Millwood	66,427	3	45.16	35	.526	8
Pacific Straw Paper & Board Co., Longview	15,777	1	63.3	11	.697	9
Columbia River Paper Mills, Vancouver	59,400	4	67.34	65	1.094	10
Rainier Pulp & Paper Co., Shelton	54,820	4	72.96	61	1.112	11
Longview Fibre Co., Longview	95,804	7	73.0	34	.354	12
Cascade Paper Co., Tacoma	37,559	3	79.87	44	1.171	13
Fidalgo Pulp Mfg. Co., Anacortes	19,168	2	104.34	15	.782	14
National Paper Products Co., Port Townsend	41,633	7	168.1	56	1.345	15

Would Prohibit Use of Old Paper

The city attorney of Los Angeles, under instruction of the Los Angeles City Council, is preparing an ordinance to prohibit the wrapping of vegetables, bakery goods, and other articles of food in old newspapers or other used and soiled papers.

Councilman C. H. Randall introduced a resolution several weeks ago explaining that communicable disease germs have been carried in old papers, and asking for the ordinance. The health and sanitation committee recommended the adaption of the new ordinance, which also will prohibit the use of old papers on tables and serving counters in eating places.

C. W. First Aid Team Shows Wares

A first aid team from the Crown Willamette Paper Company's West Linn plant put on an exhibition recently at the Kiwanis luncheon at Oregon City, and a got a good hand. One of the members represented the victim of an auto accident.

Paper Mill Still Unsold

The Colorado Paper & Pulp Co., in receivership since 1927, and ordered to be sold on March 5, did not come up for sale on that day, due to a last minute court order granting a two-month extension of time.

PACIFIC PULP & PAPER INDUSTRY

65

IMPORTS OF WOOD PULP INTO THE UNITED STATES BY COUNTRIES AND CUSTOMS DISTRICTS—DECEMBER, 1928

Compiled by the U. S. Department of Commerce Bureau of Foreign and Domestic Commerce
(Figures Subject to Revision.)

COUNTRIES—	PULP WOOD									
	Rough				Peeled				Rosed	
	Spruce Cords	Dollars	Other Cords	Dollars	Spruce Cords	Dollars	Other Cords	Dollars	Spruce Cords	Dollars
Canada	5,220	39,317	1,029	11,011	38,361	482,628	14,774	136,042	1,529	17,510
Newfoundland & Labrador					930	12,090	829	9,946		
Total	5,220	39,317	1,029	11,011	39,291	494,718	15,603	145,988	1,529	17,510

COUNTRIES—	WOOD PULP											
	Mechanically Ground		Chemical Unbleached Sulphite		Chemical Bleached Sulphite		Chemical Unbleached Sulphate		Chemical Bleached Sulphate		All Other Wood Pulp	
	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars
Austria					576	40,160						
Czechoslovakia					414	29,533						
Estonia	159	3,488	347	17,742								
Finland	549	11,634	8,610	397,109	23	1,724			242	17,224		
France			2,620	144,522	4,144	308,718	5,000	235,173			59	7,209
Germany							290	15,014				
Lithuania			96	4,824								
Netherlands			1	57	660	53,236						
Norway	750	9,480	3,263	144,016	3,151	243,799	2,625	135,194	50	4,480		
Poland and Danzig			187	8,490			382	16,888				
Sweden	28	1,378	38,770	2,050,334	5,860	421,247	37,975	2,023,957	1,425	68,933	125	6,308
Yugoslavia and Albania			392	16,647								
Canada	22,617	556,806	17,624	908,534	14,129	1,090,126	13,172	796,221	461	36,055	125	9,625
Newfoundland & Labrador	157	2,288										
Total	24,260	585,274	71,910	3,692,275	28,957	2,188,543	59,444	3,222,447	2,178	126,692	309	23,142

Total Imports for All Grades of Pulp for December, 1928—187,058 tons; \$9,838,373.

PACIFIC COAST PULP IMPORTS—JANUARY, 1929

	Pulpwood		Mechanically Ground Pulp		Bleached Sulphite		Unbleached Sulphite		Unbleached Sulphate	
	Dollars	Cords	Dollars	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons
To LOS ANGELES—										
From Finland			10,460	480			43,255	910		
From Sweden										
To SAN FRANCISCO—										
From Sweden							42,489	895		
From Canada							46,993	1,059	5,981	151
To OREGON—										
From Sweden							25,015	541		
To WASHINGTON—										
From Canada	12,470	1,643			6,659	88	1,390	30		
Totals	12,470	1,643	10,460	480	6,659	88	159,142	3,435	5,981	151

Total Pulp Imports—January, 1929—All Grades—\$194,712, 5,797 tons.

PACIFIC COAST PAPER IMPORTS—JANUARY, 1929

	Newsprint		Printing Papers		Writing & Drawing		Greaseproof		Wrapping		All Other Paper
	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	
To LOS ANGELES—											
From Europe	57,405	2,187,160			520	914	191	602	2,122	60,375	9,684
From Canada	155,765	4,674,464									
From China					64	230					244
From Japan											2,148
To SAN FRANCISCO—											
From Europe	65,462	2,511,466	893	4,160	2,836	21,866					20,493
From Canada	191,343	5,806,121									
From China			171	51	184	693					795
From Japan			466	1,391	8	30		17		27	3,190
To OREGON—											
From Europe											1,133
From Canada											50
From Japan											299
To WASHINGTON—											
From Canada	418,340	13,031,743			18	91					101
From Europe					65	385					10,139
From China					4	15					82
From Japan					5	9					6,290
Total Imports	888,315	28,180,954	1,530	5,602	3,704	24,233	191	602	2,139	60,402	54,648

Total Imports of All Paper and Paper Products—January, 1929—\$950,527.

"All Other Paper" includes all paper not classified independently above, as well as such semi paper products as paper mache, pulp board and manufactures from paper.

*Much of the news print entered in the Washington customs district from Canada is from British Columbia for interior distribution to points in the Mountain States and Southwestern United States.

PACIFIC PULP & PAPER INDUSTRY

PACIFIC COAST PAPER EXPORTS—JANUARY, 1929

	Newsprint		Printing		Writing		Greaseproof		Wrapping		Tissues	
	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
From LOS ANGELES—												
To Mexico	440	31	175	39	568	282			10,842	764	3,004	346
To Canada									3,200	315		
To Australia											5,925	375
To China											150	18
To Philippines											1,050	200
From SAN FRANCISCO—												
To Central America	35,032	2,316			205,007	10,666					1,738	192
To China	3,675	128			36	26			3,437	181	2,500	160
To Philippines	315,365	11,127			1,156	410	2,200	290	67,143	3,178	7,142	839
To Canada			517	200	2,418	456			520	52	644	328
To Japan							500	51				
To Oceania					55	10	47	9	4,276	285	264	22
To Mexico					45	30			59,450	4,421	1,260	328
To Australia									33,577	2,861	12,987	525
To Orient											2,023	369
To Colombia					13,714	829					50	4
To Venezuela					2,491	180						
From OREGON—												
To Mexico					7,029	433						
To China	482,945	16,116			56,429	3,770			315,247	13,655		
To Japan					41,419	2,052						
To Australia			17,366	900	140,886	6,877						
To South America					32,008	2,154						
To Philippines	962,168	33,555			407,300	20,466	52,896	4,722	316,773	22,878		
To Central America	60,548	2,316										
From WASHINGTON—												
To Canada			90,231	6,377	6,655	1,344	17	1	2,849	158	4,391	1,028
To Philippines			287,904	14,870	2,349	155	190	17			6,227	519
To Japan			4,370	1,058					102	8		
To China			1,809,684	108,582								
To Australia			12,467	715								
Totals	1,860,173	65,589	2,222,678	132,741	919,565	50,140	55,850	5,090	817,416	48,756	49,355	5,253

	Board		Building		Boxes & Cartons		Paper Bags		Converted Paper Products		Miscellaneous Paper & Prod.	
	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars	Pounds	Dollars
From LOS ANGELES—												
To South Africa	2,272	94										
To Mexico			14,485	668	1,462	85	1,255	113	322	149		371
To Australia			49,904	434								
To Japan			32,201	900								
To Philippines												600
To Peru												16
From SAN FRANCISCO—												
To Chile	2,088	710	15,000	468								
To South America			18,988	633								
To China	1,053,092	27,387	25,250	896			60	16				1,067
To Japan			43,366	1,460					4,272	433		1,643
To Orient	248,727	6,597	104,568	3,014					190	172		265
To Australia	189,326	6,520	138,650	4,961	324	86	166	67	537	422	12,567	
To Oceania	1,406	260	3,000	81			2,987	707	31	38		29
To Philippines							60,106	4,033	270	140		3,688
To Central America							44,494	2,572	316	258		153
To Peru	1,998	432			660	57						
To Canada	3,547	426										
To Mexico	2,088	316							1,865	479		1,444
To Europe	65	14					56,355	5,600	149	29		233
To Colombia					1,074	99						
From OREGON—												
To China	1,541,312	32,559										
To Peru									100	87		
To Philippines							36,971	2,202	1,471	103		
To Central America							1,518	126				
To Colombia							2,252	360				
From WASHINGTON—												
To Canada	99,972	4,195			589	177	25	5	3,814	1,214		3,125
To Japan	18,488	1,808			10,493	443			45	13		48
To Philippines	72,340	3,211										5,260
To China									45	13		71
Pacific Coast Totals	3,236,721	84,529	445,412	13,515	14,602	947	206,382	15,814	15,902	4,886		30,630

Total All Paper Exports for month of January, 1929—4,922 tons; \$457,890.

CLASSIFICATIONS—For convenience of presentation, some classifications have been combined, as follows: "printing" includes book (not coated), cover and surface coated paper; "greaseproof" includes water-proof; "tissues" includes crepe, tissue, paper towels, napkins and toilet; "board" includes boxboard, bristol, bristolboard and other paper board and strawboard; "building" includes sheathing, and other building paper; "writing" includes fancy papeteries and other writing; "converted paper products" includes envelopes, cash register rolls, index file and other office

forms; "miscellaneous" includes blotters, paper hangings, vulcanized fibre sheets, strips, rods and tubes, manufactures of vulcanized fibre and other paper products. COUNTRIES—Under the classification "Central America" are included all of the Central American countries and Cuba. "South America" includes only the following South American countries: Ecuador, Paraguay, Bolivia, Uruguay, and the Guianas; other South American countries are classified separately. "Orient" includes all the Asiatic countries with the exception of China and Japan, which are separately classified. New Zealand is included under "Australia."

Swedish Kraft Pulp Landed at Vancouver

Six hundred tons of sulphite kraft pulp, originating in Sweden and reshipped at Hamburg, were discharged at Vancouver, Wash., last month. The shipment was consigned to the Columbia River Paper Mills. The pulp was converted into paper for the Union Bag plant, which was recently established in that city.

B. C. May Have Australian Trade Envoy

Hon. F. P. Burden, minister of lands, states that the British Columbia government will take steps to establish a lumber commissioner in Australia whose duties will be to promote the sale of British Columbia lumber and pulp and paper in the commonwealth. This will be the first time that British Columbia has appointed a trade representative in one of the overseas dominions.



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Canadian Exports of Pulp and Paper

February, 1929

February exports of pulp and paper from Canada were valued at \$14,399,942, according to the Canadian Pulp and Paper Association. This was a decline of \$1,736,256 from the January total and was less than the total for February, 1928, by \$1,271,846.

Exports of wood-pulp in February were valued at \$3,198,828 and exports of paper at \$11,201,114 as compared with \$3,645,154 and \$12,491,044 respectively in January.

Details for the various grades of pulp and paper in February, 1929 and 1928 are as follows:

PULP—	February, 1929		February, 1928	
	Tons	Dollars	Tons	Dollars
Mechanical	9,927	276,333	14,371	374,921
Sulphite Bleached	20,758	1,598,373	18,064	1,339,896
Sulphite Unbleached	14,427	712,662	14,845	739,501
Sulphate	9,682	582,584	15,084	893,046
Screenings	1,343	28,876	1,939	35,648
	56,137	3,198,828	64,303	3,403,212
PAPER—				
Newsprint	174,469	10,615,726	183,414	11,822,383
Wrapping	1,665	187,762	1,736	187,309
Book (cwt.)	7,944	59,438	3,924	32,824
Writing (cwt.)	1,039	8,596	184	1,483
All Other		329,592		324,777
		11,201,114		12,368,376

For the first two months of the year exports of pulp and paper were valued at \$30,536,140 as compared with a total of \$29,559,830 in the corresponding two months of 1928, and increase for the current year of \$976,310.

Wood-pulp exports in the two months were valued at \$6,843,982 and exports of paper at \$23,692,158 as compared with \$6,474,659 and \$23,085,171 respectively in the first two months of 1928.

Quantities and values for the various grades were as follows:

PULP—	2 Months 1929		2 Months 1928	
	Tons	Dollars	Tons	Dollars
Mechanical	26,698	696,395	25,148	650,801
Sulphite Bleached	44,086	3,372,286	33,722	2,542,759
Sulphite Unbleached	29,017	1,445,108	32,245	1,647,684
Sulphate	20,988	1,258,253	26,417	1,567,504
Screenings	3,530	71,940	3,420	65,911
	124,319	6,843,982	120,952	6,474,659
PAPER—				
Newsprint	369,516	22,589,341	340,880	22,063,053
Wrapping	3,097	340,061	2,923	320,600
Book (cwt.)	13,461	108,585	8,314	67,480
Writing (cwt.)	1,060	9,336	1,197	11,743
All Other		644,835		622,295
		23,692,158		23,085,171

Pulpwood exports in the first two months of the year amounted to 192,549 cords valued at \$1,732,992 as compared with 286,838 cords valued at \$2,590,613 exported in the corresponding months of 1928.

The Paper Industry in January, 1929

The total paper production in January, according to identical mill reports to the American Paper & Pulp Association, was 600,454 tons as compared with 523,018 tons in December and 575,912 tons in November, 1928. The January, 1929, production total was 600,454 tons as against 533,761 tons in January, 1928, an increase of 12%.

This jump in total percentage gain over January, 1928, was largely a result of the increased activity in the paperboard industry, which increased 22% in production over January, 1928, according to identical mill reports. All grades, excepting hanging and felts and building, registered increases in monthly production over last year. Book showed an increase of 10% over January, 1928 production, while wrapping increased 6%, tissue 9%, bag 18%, writing 8% and newsprint 4%. The following grades registered production losses in January, 1929, as against January, 1928: hanging 5%, felts and building, 14%.

January shipments of paper showed an increase over

the corresponding month last year with the exceptions of hanging, and felts and building. Stocks on hand at the end of January as compared with December, 1928, showed decreases in book, tissue, and hanging and a slight increase (less than 1%) in newsprint and wrapping.

Identical pulp mill reports for January showed that the total production of all grades of pulp was 10% greater than January, 1928. Mill consumption was 8% greater and shipments to the outside market almost 9% greater than during the corresponding month last year. January, 1929 production totaled 231,031 tons against 206,149 tons in December and 220,979 tons in November.

Total stocks on hand at the identical mills reporting, registered a decrease of almost 13%. Soda and Mitscherlich sulphite registered fairly large per cent increases, while the other grades showed decreases.

REPORT OF PAPER OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF JANUARY, 1929

GRADE	Production Tons	Shipments Tons	Stocks on Hand—End of Month—Tons
Newsprint	123,822	120,263	38,003
Book	97,699	98,312	51,710
Paperboard	219,999	218,956	33,033
Wrapping	57,914	57,414	55,142
Bag	15,821	14,752	7,699
Writing	32,016	33,997	41,956
Tissue	12,571	12,801	8,940
Hanging	6,004	6,271	2,603
Felts and Building	5,745	5,376	3,170
Other Grades	28,863	28,658	18,196
Total—All Grades	600,454	596,800	280,452

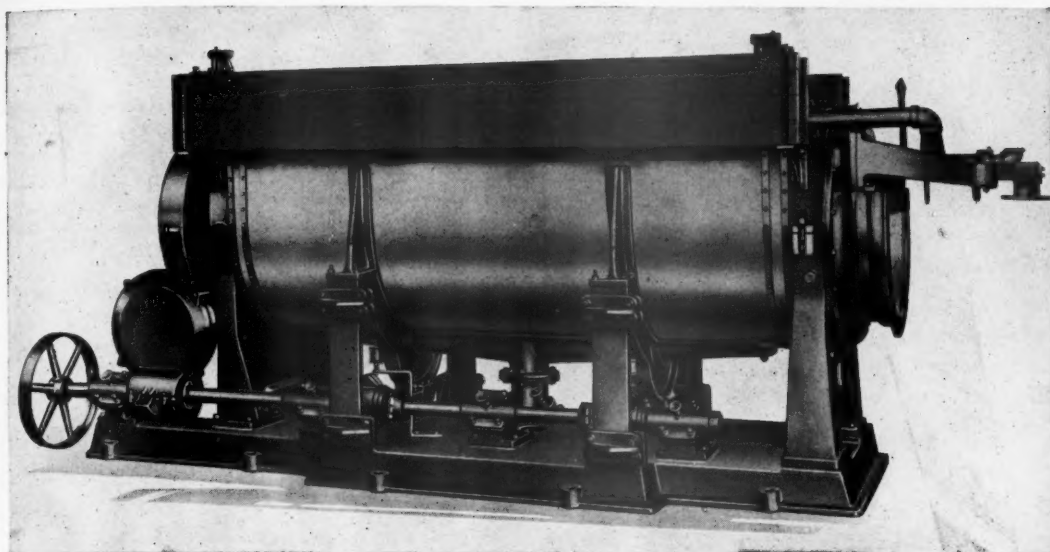
REPORT OF WOOD PULP OPERATIONS IN IDENTICAL MILLS FOR THE MONTH OF JANUARY, 1929

GRADE	Production Tons	Used During Month—Tons	Shipped During Month—Tons	Stocks on Hand—End of Month—Tons
Groundwood	97,736	90,751	2,894	85,734
Sulphite News Grade	41,176	37,622	3,394	8,641
Sulphite Bleached	27,058	24,578	2,637	2,602
Sulphite Easy Bleaching	3,471	3,000	374	667
Sulphite Mitscherlich	6,713	5,522	1,353	1,323
Sulphate Pulp	30,740	25,073	5,372	4,800
Soda Pulp	24,116	15,478	8,567	5,674
Pulp—Other Grades	21		36	8
Total—All Grades	231,031	202,024	24,627	109,449

SHIPMENTS OF OVERISSUE NEWSPAPERS

From Pacific Coast Customs Districts, Jan., 1929

From San Francisco		Pounds	Dollars
Country of Destination—			
Honduras		1,800	20
Nicaragua		10,000	143
China		112,000	1,176
Java		149,600	1,538
Hong Kong		504,000	5,236
Japan		839,840	9,166
Kwant		168,000	1,848
Fr. Oceania		1,000	16
Total	From Los Angeles	1,787,240	19,163
China		1,021,080	10,151
Fr. Indo China		424,000	4,240
Hong Kong		4,133,050	42,665
Japan		174,000	1,827
Philippines		1,054,000	10,862
Total	From Washington	6,806,130	69,745
Canada		14,346	578
Hong Kong		40,000	600
Japan		1,000	20
Total		55,346	1,198
Total Coast Shipment		8,648,716	90,106



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February Newsprint Production

The News Print Service Bureau Bulletin No. 134 states that production in Canada during February, 1929, amounted to 187,200 tons and shipments to 186,395 tons. Production in the United States was 103,644 tons and shipments 108,375 tons, making a total United States and Canadian news print production of 290,844 tons and shipments of 294,770 tons. During February, 18,783 tons of news print were made in Newfoundland and 1,367 tons in Mexico, so that the total North American production for the month amounted to 310,994 tons.

The Canadian mills produced 23,972 tons more in the first two months of 1929 than in the first two months of 1928, which was an increase of 6 per cent. The United States output was 4,361 tons, or 2 per cent less than for the first two months of 1928. Production in Newfoundland was 4,447 tons or 13 per cent more in the first two months of 1929 than in 1928 and in Mexico 440 tons more, making a total increase of 24,498 tons or 4 per cent over the same period in 1928.

During February the Canadian mills operated at 77.9 per cent of rated capacity, United States mills at 77.0 per cent and Newfoundland mills at 99.3 per cent. Stock of news print paper at Canadian mills totalled 25,536 tons at the end of February and at United States mills 35,642 tons, making a combined total of 61,178 tons, which was equivalent to 3.9 days' average production.

NORTH AMERICAN PRODUCTION

	Canada	United States	Nfld.	Mexico	Total
1929—February	187,200	103,644	18,783	1,367	310,994
1928—Two Months	401,643	227,466	39,431	3,249	671,789
1927—Two Months	317,671	231,827	34,984	2,809	647,291
1926—Two Months	313,710	255,348	31,803	2,189	603,050
1925—Two Months	275,351	269,691	26,345	1,916	573,303
1924—Two Months	237,414	243,710	10,498	1,866	493,488
1923—Two Months	222,847	250,916	11,077	1,916	486,756
1922—Two Months	191,523	242,063	10,467	2,000	446,053

Los Angeles Water Borne Paper Shipments Intercoastal, Coastwise and Hawaiian February, 1929

INTERCOASTAL			
Inbound—	Tons	Dollars	
Box and Cardboard	85	59,500	
Paper Manufactures	420	38,800	
Newsprint	42	3,360	
Papetries	21	10,500	
Printing	1,136	340,800	
Sandpaper	9	3,600	
Toilet	336	53,760	
Wall	98	25,480	
Waste	20	8,000	
Waxed	69	17,940	
Wrapping	425	59,500	
Outbound—			
Total	2,661	641,290	
Paper Bags	1	140	
Paper Waste	505	20,200	
Wrapping	83	11,620	
Total	589	31,960	
COASTWISE			
Inbound—			
Paper Goods	112	15,680	
Bags	296	103,600	
Boxes	16	3,840	
Card and Boxboard	405	91,200	
Newsprint	9,907	792,560	
Papetries	10	5,000	
Printing	508	152,400	
Wall	6	1,560	
Waxed	66	17,160	
Wrapping	1,822	255,080	
Pulp—Paper and Wood	230	23,000	
Outbound—			
Total	13,378	1,461,080	
Paper Bags	3	1,050	
Paper Boxes	28	6,720	
Boxboard	16	3,840	
Newsprint	29	2,320	
Printing	1	300	
Waste	487	19,480	
Wrapping	2	280	
Total	566	33,990	
HAWAIIAN			
Outbound—			
Paper, N. O. S.	22	3,080	
Building and Roofing	48	2,400	
Total	70	5,480	
Grand Total Outbound	1,225	71,430	
Grand Total Inbound	16,039	2,102,320	

WATERBORNE PAPER SHIPMENTS Seattle, February, 1929

	Tons	Dollars
Domestic Exports	1,640	145,477
Foreign Exports	63	7,394
Total Outbound	1,705	152,871
Domestic Imports	1,953	195,850
Foreign Imports	988	96,218
Total Inbound	2,941	292,068

WASHINGTON * WOOD PULP EXPORTS

January, 1929

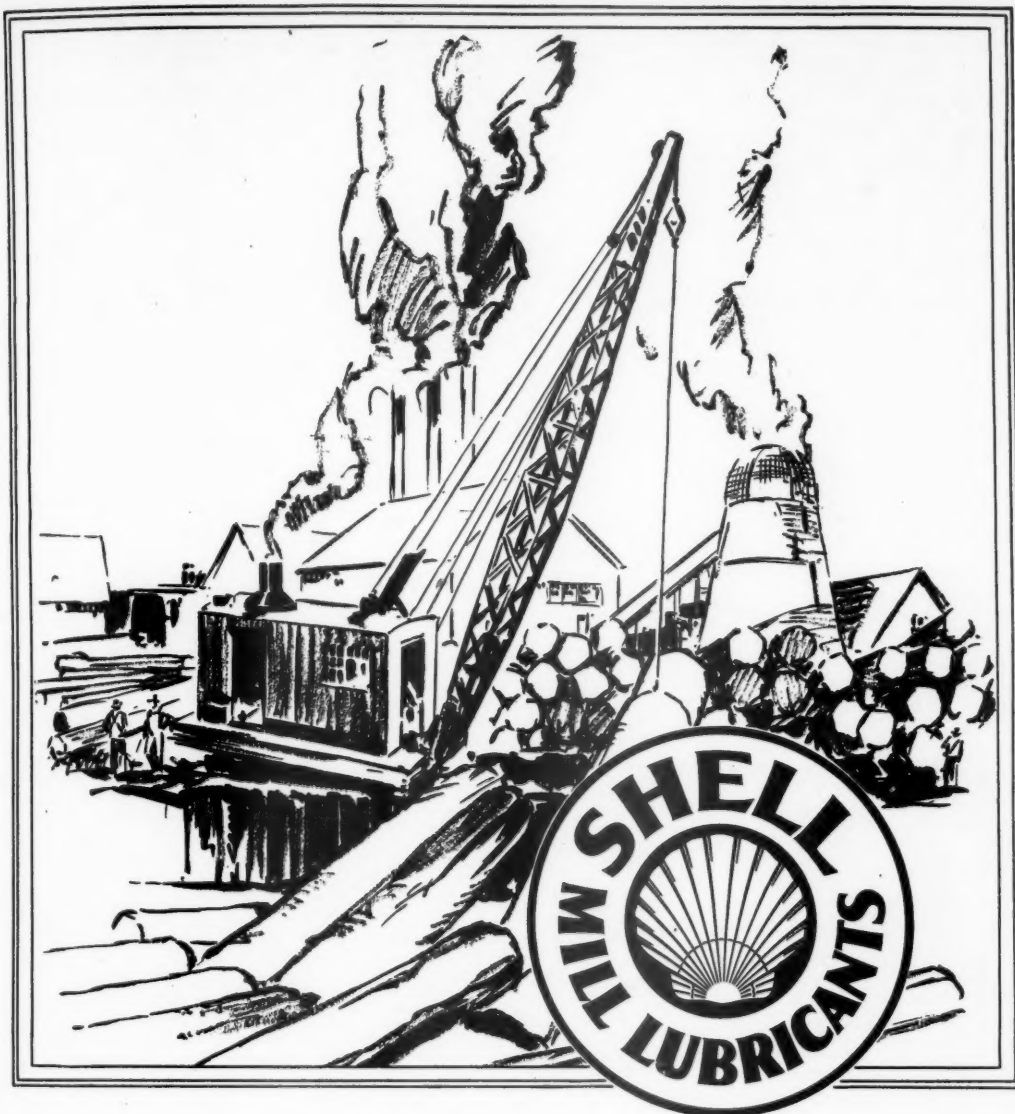
During the month of January, 1929, Washington exported a total of 3,599 tons of wood pulp valued at \$143,983.

Following are the grades of pulp shipped and the countries of destination:

Sulphite Wood Pulp		
To Italy	51 tons	\$ 2,079
To Canada	545 tons	15,751
To Japan	1728 tons	85,806

Other Wood Pulp		
To Canada	1275 tons	\$40,347

*No pulp exports are shown for other Pacific Coast customs districts.



The engineer was getting nasty

ENGINEERS get that way. But this fellow, up in one of the Douglas fir camps, was plenty mad. Three successive shut-downs—and his mill boss not hiding the thought that he could use a new engineer.

"Keep away from that guy," a visiting Shell man was warned. But he didn't. And there wasn't a murder.

And for the rest of the season the crane kept going like a clock.

Shell men aren't know-it-alls. But they do carry up their sleeves a lot of technical information about lubricants that engineers find mighty helpful. It's a Shell man's job to pass this information along whenever and wherever it's needed.

If you aren't getting this kind of advisory lubrication service, you're paying too much for your oils. Near you there's a Shell depot ready to prove it.

Car Requirements Are Heavy

With pulp and paper shipments from the Pacific Northwest swelled by greatly increased tonnage through the new mills that have gone into production during the past year and the plant additions and improvements made in the established mills, the Paper, Paper Products and Pulp Committee of the Pacific Northwest Advisory Board has forecast that carloadings for the industry in the Pacific Northwest during April, May and June of the present year will show an increase of 1,203 cars over the same period of last year.

The outbound movement in this territory on paper, box, board and pulp during the three months will approximate 3,716 cars, an increase of 47.8% over the same period of last year.

	Actual Loading 1928	Prospective Loading 1929
April	807	1,223
May	875	1,239
June	831	1,254

Total 2,513 3,716

The distribution of the 3,716 cars will be in the following territory:

	Outbound
Oregon	361
Washington	566
California	589
Eastern Territory	623
Southwestern Territory	299
Middle Western Territory	791
Canada	246
Export	241

Total 3,716

The movement will be approximately as follows for inbound:

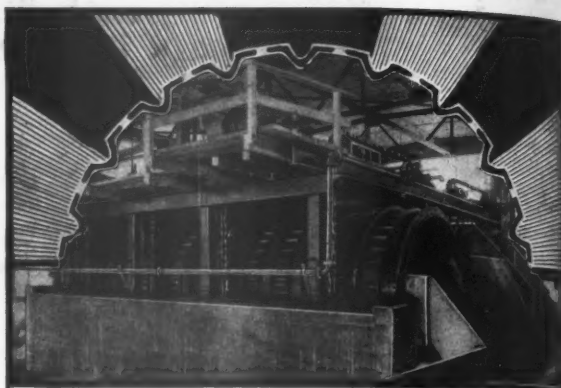
	Actual Loading	Prospective Loading
April	1,936	2,437
May	2,003	2,892
June	1,950	2,828
Total	5,889	8,457

The inbound materials are classified below showing the originating territory:

Wood from Oregon and Washington	3,926
Logs from Washington, Oregon, Idaho and Montana	1,905
Alum from California	10
Coal from Washington	73
Dolomite from Washington	3
Starch from Illinois	13
Fuel Oil from Tacoma, Portland and Longview	63
Lime from Washington	60
Building material from Washington	27
Limestone from Oregon and Washington	124
Rosin Size, in tank cars, from Florida and Georgia	19
Silicate of Soda from California	6
Soda Ash from Michigan	2
Talc from California	12
Waste Paper from Oregon and Washington	360
Sulphur from ship side, Portland, Tacoma, Bellingham and Vancouver	126
Hog Fuel from Oregon	1,683
Chlorine from California and Washington	39
Machinery from the East, Wisconsin	6
Total	8,457

Pulp For the Orient

A total of 1,468 tons of pulp, manufactured by the Grays Harbor Pulp & Paper Co. at Hoquiam, were shipped from the company's docks at Hoquiam to the Orient via Japanese freighters during March. This was the largest oriental shipment for a month made by the company's pulp mill which has only been in operation since last October. The company also shipped considerable pulp to California and to Northwestern United States.



IS YOUR BARKING CAPACITY GUARANTEED?

The U-Bar Barking Drum is guaranteed for two years at a minimum speed of 7½ R.P.M. (10 ft. diam.) running half-full of wood at an average of 3,000 working hours per year. This is all in addition to the usual guarantee of workmanship and materials.

HOW THE U-BAR GUARANTEE INSURES BIG PRODUCTION

This guarantee insures BIG and sustained production. Three factors govern capacity: Interior Surface, Volume and Speed. Examine the U-BAR Drum from these angles:

1. *Interior Surface:* U-BARS bark more quickly and cleanly with no unnecessary loss of wood fibre.

2. *Volume:* You can keep a U-BAR Drum HALF-FULL of slabs or logs all the time—a 10'x30' U-BAR Drum, for instance, carries a working load of five cords of wood. Think of it!

3. *Speed:* 7½ R.P.M. are guaranteed in the U-BAR Drum and many mills increase their capacity greatly by stepping this up to 10 R.P.M. Speed is important.

When you consider barking drums, insist on a capacity guarantee.

THE MORTERUD SYSTEM

Production records of the Union Bag and Paper Mills attest to the efficiency of the Morterud System of Indirect Soda and Sulphate cooking. It produces an even cook and a greater yield with forced circulation of preheated liquor. Steam is not introduced directly into the digester but circulates through a series of seamless steel pipes and the condensed water is pumped back to the boilers. Therefore there is no dilution in digester and less steam is used in the evaporation of liquor.

THE GIANT NEKOOSA BARK PRESS

Make a steam generating asset out of your bark disposal problem with this wonderful Bark Press. It reduces the water in bark to 55% bone dry—which is almost natural water content. Simple operation. Strong and rugged construction. Surprisingly great economies result from the use of this machine.

Full Details Sent on Request

Fibre Making Processes, Inc.

CHICAGO, U. S. A.

Canadian Barking Drum Co., Ltd., Toronto

BARKING
U-BAR
DRUMS

72a



The vast natural resources on the Pacific Coast, plus experienced and far-seeing leadership, are significant criteria for judging the future of the Pulp Industry on the Western Slope.

British Columbia Bleached Sulphite

is outstanding for its high quality, and in its production, important factors are Bear Brand Bleach and Liquid Chlorine, made by—



GREAT WESTERN ELECTRO-CHEMICAL

Executive and Sales
9 Main Street
SAN FRANCISCO

COMPANY

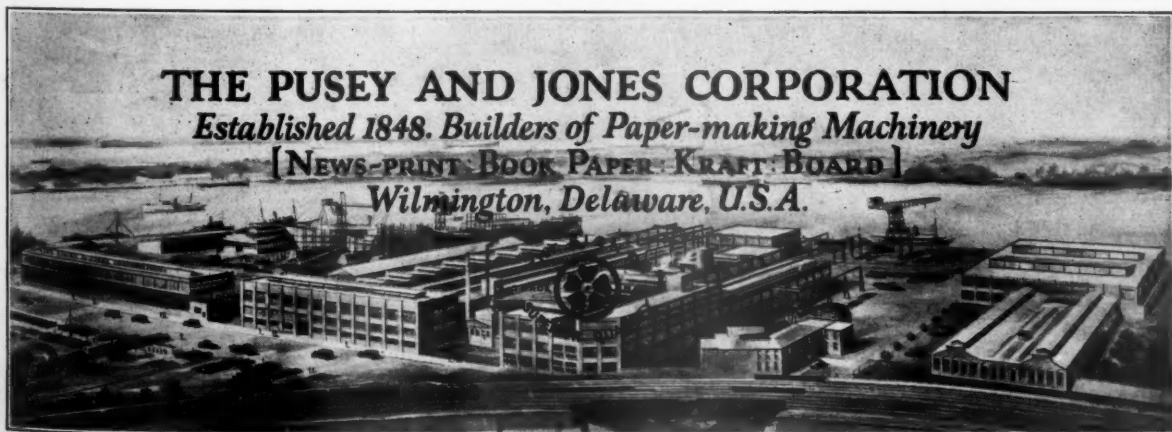
Plant
PITTSBURGH
California



...by a nose!

A winner by inches . . . first place by a fraction of a second. But that's all it takes to win in horse racing or paper making.

Machines a few inches wider or a few feet per minute faster develop a lead over less modern equipment that soon is measured in miles of paper and thousands of dollars.



When writing to PUSEY & JONES CORPORATION please mention PACIFIC PULP AND PAPER INDUSTRY

Powell Augments Finishing Room Crew

Two important changes have been made recently in the routine of the finishing rooms of the Powell River Co., Ltd., at Powell River, B. C. It has become necessary to put a second shift on the cutter to keep pace with the orders, one shift working from 8 to 4 and the other one from 4 to 12. A new plan has been adopted with all small rolls, which is expected to solve the problem of air bursts in the wrapper which has caused considerable worry and expense in the past. When the roll is dumped on the floor from the truck the air which has accumulated between the wrapper and the paper itself cannot escape fast enough and very often the wrapper splits up the side under the sudden strain. This necessitates the roll being rewrapped, which entails loss of time and considerable waste. The same problem does not arise with big rolls as they tip up more slowly off the trucks. All small rolls are now bound tightly with a $\frac{3}{8}$ steel wire answering all the requirements of the situation quite adequately.

Los Angeles Roofing Factory Expanding

L. C. Cotner, president of the Pacific Star Roof Co., whose main office is at 3960 South Grand Ave., Los Angeles, California, states that whereas his company has been purchasing the materials used in its business, it this year will enter the manufacturing field, having purchased a factory formerly occupied by the California Cyanide Co., and located near Los Angeles in Southgate.

The company plans to manufacture a full line of strictly high grade roofing products, including composition shingles and an excellent quality in paper roofing, Mr. Cotner announces. He states that the company does the largest retail application roofing business of any concern west of the Rocky Mountains, and that in addition to Los Angeles, maintains offices and carries on its operation in seven cities on this coast. These seven cities are Oakland, Fresno, Visalia, Pasadena, Long Beach, Sacramento, and San Jose. The company has a sales organization of forty persons, and in all its activities employs from 150 to 175 persons. It operates 21 trucks.

The capitalization of the business was increased in November of last year. Included in the firm's board of directors are Ralph Stephens, vice-president, and president of the City National Bank, Huntington Park, California; John Zobelein, chairman of the board of directors, and vice-president of the Los Angeles Brewing Co.; W. A. Holcomb of the law firm of Holcomb & Holcomb; R. L. Fige; Oscar Sebastian, secretary and treasurer; John Fisher, auditor.

The business had a humble beginning some six years ago, having been founded by President Cotner, who has directed its operations. Mr. Cotner states that West Coast capital is back of the business, and that the factory, together with equipment will entail an investment of \$100,000, and that all the equipment will be new.

The factory will have 21,300 square feet of floor space, and it is expected that it will be in operation by June 15.

Mr. Cotner says felt for use in the factory will be purchased from the Los Angeles Paper Manufacturing Co.

The company's present Los Angeles offices and warehouse on Grand Avenue are to be retained as headquarters of the business, Mr. Cotner states.

**"Send this
paper
every
time"**



WHAT paper manufacturer doesn't like to have users speak that way about his paper?

A user who feels that way toward a certain paper knows how dependable it is—he knows from experience that it saves him worry and trouble, and he insists upon getting it.

Behind such a paper is a manufacturer who himself places a high value upon dependability. He also insists upon supplies and equipment of proved merit—particularly does he recognize the value of dependable Fourdrinier Wires.

That is why papers of every kind, from the finest tissues and cigarette papers, to heavy wrapping and roofing papers are made on Tyler Fourdrinier Wires.

Let us send you a small sample so that you may see for yourself the firm weave and uniform mesh.

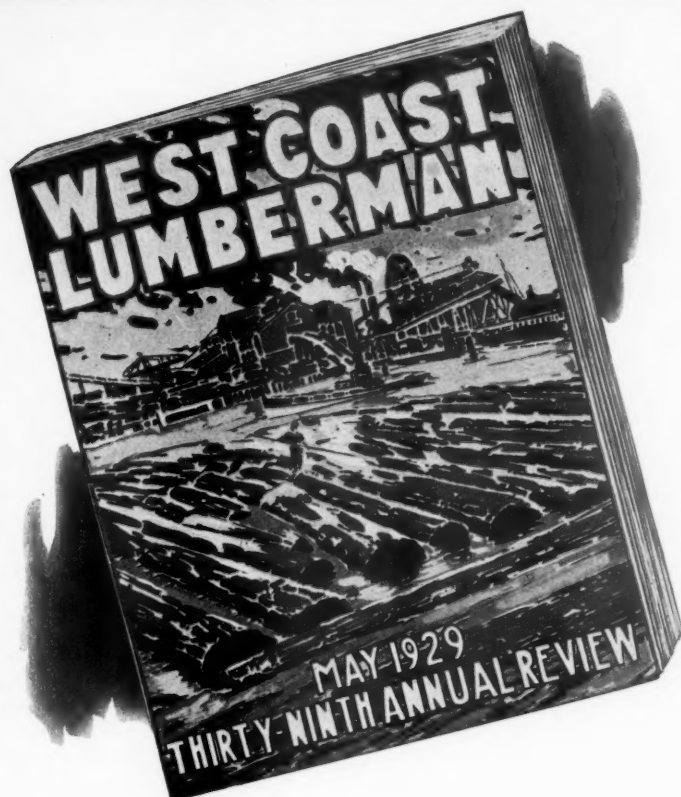


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WOOD
CHIPS



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literature

The W. S. TYLER COMPANY
CLEVELAND, OHIO



*To Be
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May 5, 1929

Price \$1.00
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Now you won't *have* to remember...

. . . you'll just reach over on your desk—take up the Review—glance at the table of contents—and in a jiffy the fact or figure you want will be before your eyes—no reason for taxing the memory—let the Review do that for you—it will be your book of ready reference through the ensuing twelve months—the Review will remember for you.

The Thirty-Ninth Annual Review of the West Coast Lumberman will be a book replete with valuable information, interesting and entertaining illustrated articles, statistical data and tables of inestimable worth to every man connected with the lum-

ADVERTISERS

If you are selling to the Producers of Western Lumber, to the Logger, to the Manufacturer, to the Man Who Buys or the Man who sells Western Lumber, this Annual Review is the ideal medium of Advertising for you to employ.

ber industry of the Far West. In this Review, every phase of western lumber will be covered, clearly and concisely. The book will be profusely illustrated, and will be the most attractive volume ever distributed among lumbermen and loggers.

**Every Man Interested in Western Lumber
Will Preserve for Frequent Reference**

Thirty-Ninth Annual Review

West Coast Lumberman

71 Columbia Street

SEATTLE, U.S.A.

Curtiss Wood Works Making Roll Plugs

Curtiss Wood Works, Inc., Olympia, Wash., is enjoying a good volume of business in the manufacture of wood turnings, a principal product being paper roll plugs. The plant, incorporated in July of last year, is fully equipped to turn out any orders in this category and is pleased to receive enquiries for specific wants in the wood turning line.

The officers of the company are experienced manufacturers. J. E. Curtiss is president; L. R. Judd, vice-president; L. M. Judd, treasurer, and R. E. Munson, secretary.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of Pacific Pulp & Paper Industry, published monthly—except in March, when publication is semi-monthly—at Seattle, Washington, for April 1, 1929.

State of Washington, County of King,—ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Lawrence K. Smith, who having been duly sworn according to law, deposes and says that he is the business manager of the Pacific Pulp & Paper Industry, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Consolidated Publishing Co., 71 Columbia St., Seattle, Wash.

Editor, Lloyd E. Thorpe, 71 Columbia St., Seattle, Wash.

Managing editor (none).

Business manager, L. K. Smith, 71 Columbia St., Seattle, Wash.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

Consolidated Publishing Co., 71 Columbia St., Seattle, Wash.

Miller Freeman, Daniel E. Pratt, Lawrence K. Smith, W. E. Crosby, G. W. Cain, all of 71 Columbia St., Seattle, Wash.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in case where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation, has any interest direct or indirect in the said stocks, bonds, or other securities than as so stated by him.

LAWRENCE K. SMITH, Business Manager.

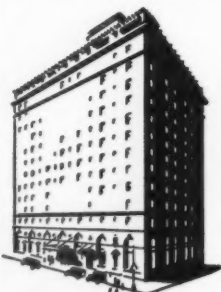
Sworn to and subscribed before me this 30th day of March, 1929.

(Seal)

RALPH H. MOULTON.

(My commission expires June, 1932.)

SEATTLE'S New Washington Hotel



A "Habit" With
Pulp and Paper Men

Unexcelled food, comfortable rooms, sleepy beds have made the New Washington home for Pulp and Paper men when they're in Seattle.

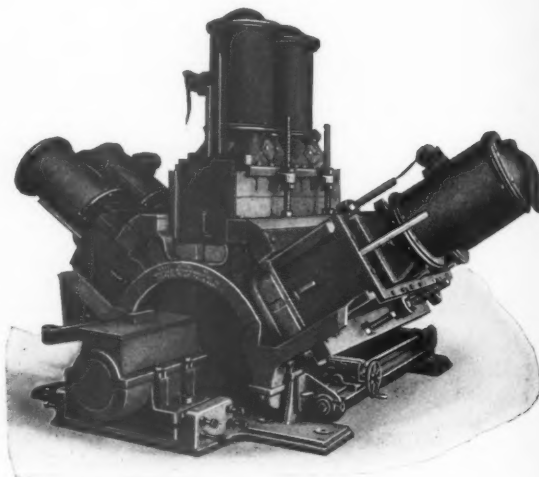
Rooms all with bath
From \$3

SECOND at STEWART

International Grinders

For Four Foot Wood

Curtis Patent



Now built in two sizes.

Hitherto stone size 54"x54".

New design takes stone 60"x54".

Capacities 15-18 tons.

Full particulars upon request.

WE ALSO BUILD:

The Montague Screen.

The Curtis Patent Hydraulic Grinder
Lathe.

Automatic Water Jet for cleaning Cyl-
inder Mould Wires.

Automatic White Water Sampler.
Ball Valves.

We Are Conveniently Located for Ocean
Shipment to Pacific Coast Points

Montague Machine Co.

TURNERS FALLS, MASS.

George Pusey Resigns From Hawley

George Pusey has resigned as general superintendent of the Hawley Pulp & Paper Co. mills at Oregon City. Mr. Pusey, who is a brother-in-law of W. P. Hawley, president of the firm, has been closely associated with the industry on the Pacific Coast for some 40 years. He joined the Hawley company at its inception after a period of prior service with the Crown Paper Co. (now Crown Zellerbach Corp.).

Now that "George," as he is familiarly known to the population of the thriving mill town at Oregon City, has thrown off the cares of the mill, he plans to devote more time to his hobby, a complete machine shop in the basement of his home. His father before him was a millwright and mechanic who won fame in the earlier days with the pioneer paper mill, the California Paper Co., at Stockton, Calif. "George" has followed in that same line of mechanics and loves the precision of the machine shop. He has, in that basement shop of his, turned out finished firearms that a gunsmith would be proud of as well as other articles requiring like degree of skill.

Federal Board Mill Project Rests

A petition filed last month with the city council by Goldberg brothers of the Federal Paper & Board Mills, Portland, for a street vacancy adjoining the company's warehouse at the foot of Harrison Street had not been acted on as this was written. Action was being deferred until April 17, it was said. In filing the petition, I. Goldberg, secretary of the company, stated that establishment of the proposed board mill was contingent on favorable action by the council.

Sulphite Course Has Full Attendance

The first of two ten-day courses in sulphite pulping scheduled by the Forest Products Laboratory at Madison, Wis., for this spring got under way Monday, March 25. Fifteen men (the maximum enrollment for the class) answered the initial roll call. Eleven companies were represented. Two of the companies had men in identical 1927 courses, one sending the same man who registered in the present class. This particular mill superintendent, a man of extensive practical experience, applied the instruction received in the previous course to good advantage, but he enrolled again with the expectation of extracting the absolute maximum of benefit from the instruction offered.

Two of the companies sending men to the March 25 course enrolled two each. One company, operating a number of mills, enrolled three men. Several Canadian mills were represented.

A second sulphite course will be given at the Forest Products Laboratory April 29 to May 9. Enrollments for this course will as usual be limited to fifteen. Ten of these enrollments have already been subscribed. Director C. P. Winslow has announced that additional enrollments, accompanied by the co-operative fee of \$200 for each man enrolled, up to the maximum will be accepted in the order of receipt.

Paper Machine Arrives at Hoquiam

The Grays Harbor Pulp & Paper Co.'s pulp mill at Hoquiam received a consignment of 450 tons of heavy machinery March 16 by steamer from the east coast. The consignment consisted principally of parts for the new paper machine.

The First Big Story

of the

Pacific States Paper Trade Association's Annual Convention

at

Del Monte, California
May 8-12th, 1929

Will appear as the feature of the May number accompanied by photographs of those attending the convention.

This convention story together with the journal's usual up-to-the-minute personal news of the trade will cause everyone attending the convention to keep a copy of the May issue.

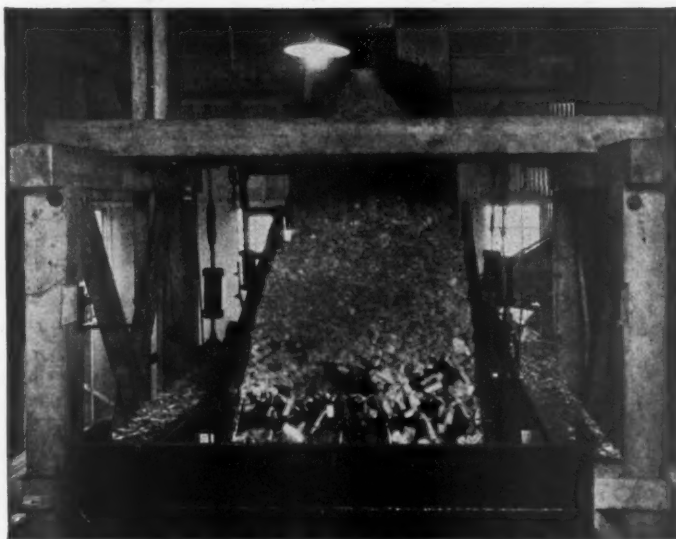
A most valuable advertising tieup is offered by this feature story to those who sell to the paper trade of the Pacific Coast. Copy can be used up to May 10th.

 71 Columbia Street

PACIFIC
PULP and PAPER
INDUSTRY

 SEATTLE, WASH.

Here's the New....**SCREEN SUPREME**



Photograph of Screen Supreme operating in a Pacific Coast Pulp Mill

**Increased Capacity
All Steel Sash
Staggered Decks
No Moving
Wearing Parts**

*Write Nearest Office
For Details*

**The
Traylor Vibrator Co.**

**1400 Delgany St.,
DENVER, COLORADO**

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NATIONAL EQUIPMENT CO.—101 West Second South St., Salt
Lake City, Utah.
SEATTLE, WASH.—Hotel Frye.

Fog and condensation *stopped* without costly equipment

Any mill man who has used Skinner Air Heaters will tell you that it is *not* necessary to install and maintain expensive, complicated hoods and ducts to eliminate drippage.

Again and again Skinner engineers have demonstrated that mois-

ture can be controlled simply and inexpensively. Comparatively small Skinner units, set in an out-of-the-way place, will prevent fog and drippage every place in the room. In a very few minutes, a Skinner man can explain why Skinner Air Heaters can accomplish this result so easily.

Savings run into thousands of dollars

Just to give an idea of the savings usually made with Skinner Air Heaters, *one mill saved approximately \$6000* over what the more complicated equipment would have cost. This is by no means an isolated case. Skinner Brothers' files are full of data on similar savings.

Skinner Bros. guarantee that the specified results will be accomplished or the units will be taken

back. The value of this guarantee is best proved by the fact that, in the 34 years since Skinner engineers originated the unit heating method, *no Skinner heater has ever been returned for failure to meet the guarantee.*

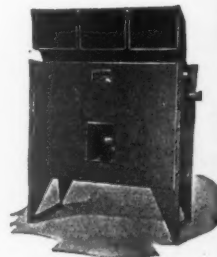
Ask a Skinner man to call on you or, for purposes of estimate, write us giving *dimensions of room and daily output.*

Skinner Bros. Air Heaters

SKINNER BROS. MFG. CO., INC., ST. LOUIS
1450 S. Vandeventer Av.—Seattle Office, Railway Exchange Bldg.



**SKINNER BROS.
"BAETZ PATENT"
AIR HEATER**



**SKINNER BROS.
TYPE "U"
AIR HEATER**

ume 3
ber 6

er Aerial